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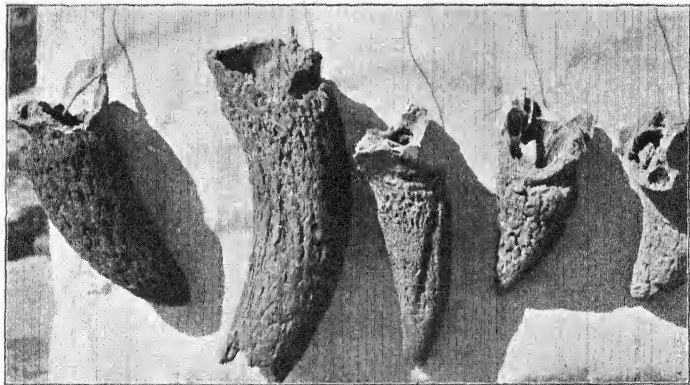


FIG. 204.—TYPICAL COWS' HORNS FROM THE FIVE PERIODS

THE  
EXCAVATION OF GEZER

VOL. II







THE ALIGNMENT OF THE HIGH PLACE.

# THE EXCAVATION OF GEZER

1902—1905 AND 1907—1909

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WITH NUMEROUS ILLUSTRATIONS

IN TWO VOLUMES OF LETTERPRESS AND  
ONE VOLUME OF ILLUSTRATIONS

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1912



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# THE EXCAVATION OF GEZER

## CHAPTER VI

### DAILY LIFE: I FOOD AND DRESS

#### § 25.—DOMESTIC AND OTHER ANIMALS

WE have two sources of information regarding the domestic animals used, and the wild animals observed, by the Gezerites\*: the bones of actual specimens, and small models of animals, when the species of the latter can be identified.

Such models were rare in the Pre-Semitic Period, and not very common at the beginning of the Semitic civilization; but they rapidly increase in frequency, reaching a maximum about the transition from the Third to the Fourth Semitic Period. During the latter they diminish, and in the Hellenistic Period are again uncommon. As a rule they are of the feeblest and most infantile style of art, being just such figures as a child might model with a piece of putty. More ambitious efforts are found from time to time, but in none has the artist been able to avoid grotesqueness

The figures are either hollow or solid, the latter being rather more frequent. The hollow figures have evidently been used as vases, a hole in the back being provided for pouring liquid in, and the nose of the animal being treated as a spout for pouring it out. These vessels are not improbably feeding-bottles, or perhaps lamps, the wick being passed through the spouted mouth. They are often made of fine ware, with painted stripes—*e.g.* Plate cxxvi, fig. 23 [V 29].

In some specimens the head of the animal gives place to a jug-mouth. These *askoi* are probably suggested by water-vessels made of

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\* I use the word "observed" rather than "known" because the Natural History of Palestine past and present being already familiar, it would be unnecessary to inquire what animals *existed* in the country. What we want to find out is, of what animals did the Gezerites take special notice?

the skins of animals such as are still in common use in the East. They belong as a rule to the late Third Semitic Period. Plate cxxvi, figs. 22, 25, 26, are good examples, all found in cisterns.

The collection of fragments on Plates cxxiv-cxxvi will illustrate better than description the general style of such figures and the methods in which the different features are represented. The eye is treated in various ways. Most frequent is a pellet, separately modelled and stuck on (as Pl. cxxiv 1 [V 20]). This way of forming the eye is found in all the periods over which the range of animal figures extends, but it often happens that the pellets, having been imperfectly secured to the body of the animal, have fallen off. Sometimes (though not commonly) the pellet is fastened in the middle of a wide bowl-shaped depression, as in the bird head Pl. cxxvi 17 [IV 6]. Also common, though perhaps not quite so frequent, is the representation of eyes by two holes prodded with the end of a stick (Pl. cxxiv 2, also from V 20). There are other varieties of which a few individual examples were found. Thus in Pl. cxxiv 3, from the same place, the base of the cow's horn and the eye have coalesced to form a single scratch. Very exceptional is the representation of the eye as a long narrow ridge, as cxxiv 7 [VI 18]. The anatomical details of the eye are occasionally, but rarely, suggested by dots or strokes in the centre of the pellet. cxxiv 8 [VI 13] is a curious example, and also cxxiv 20 [V 27]. In another example, from V 19, a pellet-eye had a horizontal stroke running across the middle. The small knob on the forehead of the first of these examples represents no doubt a tuft of hair, which is sometimes indicated by painted lines. In Pl. cxxv 21, which is a fragment of a large cow figure in burnished red ware, found on the rock, the eye is represented by two raised concentric circles.

When the vessel is hollow, the nostrils and mouth coalesce into the circular spout-hole. Otherwise they are represented by two perforations and a slit, as Pl. cxxiv 11, which is a type common in all periods. In Pl. cxxiv 17 [II 19] the mouth is represented open: this is rather uncommon. In Pl. cxxv 9 [IV 30] will be found an exceptional case of the nostrils being represented *in addition to* a spouted mouth.

In practically all cases the head is looking straight forward. Indeed there is only one exception that I noticed among the hundreds of such fragments of figures that came to light. This is Pl. cxxiv 23 [III 15], where (as the view from below more clearly shews) a cow is represented with head turned sideways. It is probable that this is the result of some accident in the manufacture rather than a design of the maker. The triangular projection on the forehead is probably a representation of the animal's forelock.

In the best-modelled specimens the ears stand out prominently, and in the case of cows are independent of the horns; so that there are properly four projections from the head of representations of such animals. It is not always obvious which pair are intended for horns and which for ears, but the purpose of the artist is to shew both. In the majority of cases, however, the ears are absent from horned

figures; and in some few instances the horns themselves coalesce into a single raised knob above the head. In Pl. cxxvi 14 [IIIa 27] the head has degenerated into a pair of horns and a spike in front, and each pair of legs is run together.

It is not common to find any attempt to represent hair or other markings on the body of the animal, and I found no trace of an indication of ownership-brands, such as would be very prominent if a modern Palestinian artist were representing an actual animal before him.\* The scratched ornament on the cow's head Pl. cxxvi 16 [I 5] should, however, be noticed in passing. Sometimes various features of the animal were intensified by paint; which is also used quite arbitrarily, as in the cow's head Pl. cxxvi 4 [V 8]. The hatched lines are painted red in the original. In figures of sheep, punchmarks of various patterns represent the wool—e.g. Pl. cxxiv 22 [VI 17]. An older example, in red ware, will be seen in Pl. cxxv 1 [II 30]. Similarly a nicked ridge represents the mane of the horse—e.g. Pl. cxxiv 36 [VI 29]. In Pl. cxxiv 37 [VI 28] the ridge is *not* nicked.

The legs are represented in the simplest way, by more or less cylindrical bars. Sometimes a pellet, similar to the eye-pellet, is attached to indicate the knees.

There are certain special marks in individual specimens less easy to explain. Such are the longitudinal groove under the belly of Pl. cxxiv 19 [VI 13] and the perforation from side to side through the hindquarters of Pl. cxxiv 25 [VI 28]. The first of these is unique: the latter is not infrequent, and probably means that the animal figure was adapted as the handle of a bag, like the bag-handles of pottery to be described later. Compare the nondescript fragment Pl. cxxvi 11. Also unusual are the two conical knobs on the haunches of the fragment cxxvi 15 [V 12].

As a rule the animal figures from the earliest period, which are made of the gritty ware that supplies most of the material for the contemporary pottery, display prodded rather than pellet eyes, and often have the two pairs of legs not divided—one block representing both forelegs, and one both hindlegs, as in Pl. cxxvi 14, already referred to. A characteristic specimen is Pl. cxxv 4 [II 30]. Pl. cxxv 6 is another specimen in this case the head has all shrunk into the large horns (now broken off) and a single pellet in front. In cxxv 5 [II 28] is a pellet-eye with the iris indicated. Generally speaking the animal figures from the lowest strata appear to be shorter in proportion to their other dimensions than those from the later débris.

The animal figures of the latest period—probably the Persian or early in the Hellenistic age—have a very characteristic form, well shewn in Pl. cxxv 15. This has a flat body with four straight legs—not unlike a table—and an upright neck and a round snout, either absolutely cylindrical or slightly tapering. The legs are sometimes parallel, and sometimes spread out like an inverted V as in Pl. cxxv 16 [IV 30]. The latter seems on the whole to be an earlier type.

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\* The tibia of a cow was found in the Third Semitic stratum shewing advanced periostitis, probably due to a long-standing ulcerated wound. It was an indication that the ancient Palestinians were as brutally indifferent to the sufferings of animals as are their modern descendants.



When the figures are solid, with solid snouts, the latter are more nearly cylindrical than in hollow figures. In some specimens there is a tendency to a dice-box shape, as in Pl. cxxv 20 [V 30].

The ware of which these figures are made is in all respects similar and similarly treated to the contemporary pottery vessels. On this subject the reader may be referred to the section on pottery.

It has been necessary to prefix this study of the plastic representations of animals, in order to shew how far it is possible to identify the



FIG. 204.—TYPICAL COWS' HORNS FROM THE FIVE PERIODS

species intended by the artist. We can now proceed to the main subject of this section, and consider the different species of animals that were observed or utilized by the Gezerites.

By far the most important was the *cow*. A considerable number of cow-bones was found at all levels from the Pre-Semitic to the Hellenistic, and fully three-fourths of the recognizable models of animals represented this species. Probably to some extent this is due to the place of the cow in the religious life and belief of the Semitic peoples. It did not, however (as in India), prevent the use of cow-flesh for food—many of the bones shewing unmistakable signs of the processes of cookery—or interfere with the use of the bones of cows as material from which to fashion various

implements. Sometimes the bones were found sawn across, probably to facilitate extraction of marrow.

Throughout the strata a large number of cows' horns were found. These were collected and dated; and when they came to be sorted, it was found that each period had its own peculiar breed of cattle, almost

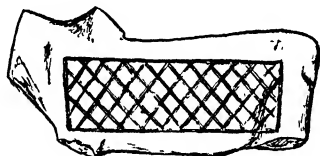


FIG 205.—TORSO OF A ZEBU

as distinctive as its own pottery. Typical horns from the five periods are shewn in fig. 204. In the Pre-Semitic and First Semitic Periods the horns were fairly long, smooth, and curved; in the Second Semitic Period they were longer and larger than in any other, and often shewed longitudinal grooves on the surface; in the Third Semitic Period they were smaller and grooved spirally; in the Fourth Semitic Period they were, almost without exception, short conical knobs; and in the Hellenistic Period they were likewise short, but more curved. A few buffalo horns were found here and there, but these were uncommon.

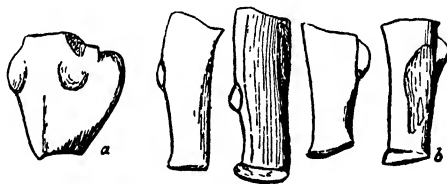


FIG 206.—LEGS AND HEAD FROM COW FIGURES

Moreover, some of the models seemed to shew that a species of *zebu*-like humped cattle was in use which is now entirely unknown in Palestine. An interesting example is the torso fig. 205, which is just 3" long. This is covered over with a yellow slip, upon which a fret is painted in dark red lines on the sides. It was found in the Central Valley, in débris

containing Egyptian objects of the Eighteenth Dynasty. Another example is the torso Pl. cxxv, fig. 2 [IV 30].\* The four cow-legs (fig. 206), though apparently belonging to one figure—they were all in white burnished pottery—were strewn here and there in the level to which they belonged, as though the owner of the figure had broken it and thrown the pieces about. A similar leg, but without the prominent knee, was found in VI 18. The cow's head in the same figure was from the same place, but does not belong to the same object. It is not common to find the dewlap of the cow so prominently indicated as it is in Pl. cxxvi 24 [III 7].

What may be denoted by the row of knobs and the loop in Pl. cxxiv, fig. 20 [V 27], is doubtful. The species of the animal is not determinate: the long neck suggests a camel, the details of the head a cow. The feature referred to is perhaps meant to indicate a collar of leather with metal studs and a ring for a rope, by which to secure the animal. It is analogous to the white band painted on the red ground-colour of the pottery in Pl. cxxvi 12, which certainly represents a cow. This came from stratum V, in the neighbourhood of the High Place.

Sometimes a cow's head is found with a ridge crossing above the eyes difficult to account for. I have thought it may be an attempt to represent a board hung on the horns of savage cattle. An example will be found Pl. cxxiv 4 [IV 20]. It must be admitted, however, that this device is not apparently used in modern Palestine. Pl. cxxiv 9 represents a yet more curious case, in which a cap, apparently of leather, with regular blinders, seems to be passed over the animal's horns. The modelling of Pl. cxxiv 28 is bad, so it cannot definitely be decided whether its peculiar appendages be the usual ears and horns, or another form of blinder. Pl. cxxv 23 [III 20] has some kind of yoke on the neck, apparently similar to that still used in harnessing cattle to the plough.

Next in importance, and equally universal over the whole of the city's history, come the *sheep* and *goat*. Cooked and worked or unworked sheep and goat bones are almost if not quite as common as those of the cow; though modelled figures of these animals are rarer than cow figures, possibly because they had a lesser importance in religion. We must there-

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\* This hump has to be carefully distinguished from the attachment of a loop-handle such as was fixed in the back of Pl. cxxv 14 [IIa 30]. This is a small rude nondescript figure, in black ware

fore notice specially the rude modelled figure of a ram's head Pl. cxxiv 29 [VI 17]: another, from the First Semitic stratum, appears in Pl. cxxv 4. A ram's head picked out in red paint is used as a corbel below the lower attachment of a handle, Pl. cxxv 8 [II 28]. Whether Pl. cxxiv 35 [VI 29] be also a ram or not, I am uncertain; but probably cxxiv 30,

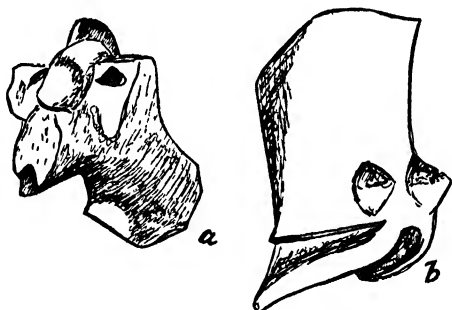


FIG 207—HEAD OF A CAMEL (a) AND TROTTER OF A SHEEP (b)

from the neighbourhood of the Maccabaeen Castle, is the head of a sheep. Pl. cxxiv 31, which is also from the surface stratum, seems to represent a goat, likewise an animal not very commonly modelled. Fig. 207 *b*, which came from near the inner wall in trench I and belongs to the Second Semitic

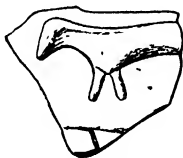


FIG 208—POTSDERD WITH FIGURE OF A SHEEP IN RELIEF

stratum, seems to represent a sheep's trotter. The potsherd fig. 208, from the same place, has a figure resembling a sheep in relief upon it. Pl. cxxv 24, from the Hellenistic stratum, represents a goat. Notice how the horns are protected from fracture by being backed with a projecting plate of pottery on which they stand out in relief. A rude graffito, on a slab of

limestone, representing a man and two goats, is shewn in fig. 209. The slab is  $3\frac{1}{4}$ " long. It came from V 20. Pl. cxxv 11 and Pl. cxxvi 5 are also heads of goats, from stratum IV. Sheep-bones were sometimes used for making the handles of knives, etc.

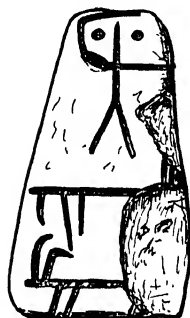


FIG. 209.—SLAB OF LIMESTONE WITH GRAFFITO OF A MAN AND TWO GOATS

The *pig* is always rare, as is natural, considering the abhorrence in which it was universally held by the Semite. Very few pig-bones were found in the débris. The tabu against swine-flesh in modern Islamic Palestine extends to the flesh of the wild-boar, and probably this was the case in ancient Palestine as well. But the tusk of the unclean animal is a powerful prophylactic against the evil eye, and the numbers of boars' tusks found in the excavations suggest that this belief is very ancient. We shall return to this subject in a later chapter. The small ivory figure Pl. cxxv 17 [VI 30] may possibly represent this animal. The pig is also much in evidence in an alabaster group described in Chapter VIII.

The *dog* (no doubt a half-wild pariah as in modern Palestine) was also common. Its bones were used for making prickers and similar tools.

No recognizable model of a dog was found in the excavations. Sometimes a dog succeeded in forcing his way into the tomb-chambers, no doubt to feed on the dead. Twice the skeleton of a dog was found, in one case with the First Semitic interments in the Troglo-dyte burial cave, in the other in a Byzantine tomb. The long-snouted head Pl. cxxiv 6 [IV 20] may possibly represent an animal of the dog tribe



FIG. 210.—FIGURE OF TWO CATS (GREEN ENAMELLED)

I have no note of having recognized any bones of the *cat*. That the species was known, however, is shewn by models, of Egyptian origin. One such is shewn full size in fig. 210. It was found in the débris filling cave 16 III.

The *donkey* was, as in modern Palestine, the normal beast of burden, and was domesticated from the first, as bones and a few models shew.

Pl. cxxv 27 [II 19] is a rudely modelled representation of an animal, presumably a donkey, on whose back is a lump that probably represents

a bale of merchandise.\* More commonly, however, merchandise was carried swung over the animal's back, in balanced panniers or saddlebags—just as to-day. The panniers were sometimes made separately and morticed to the body of the animal. These are often lost, leaving the empty tenon-holes. Compare Pl. cxxvi 7 [V 12]: this figure was covered all over with red paint except where the panniers had been. See also the remarkable instance fig. 20 on the same plate, from the Second Semitic Period. Waterpots were also slung on each side; an example remains in Pl. cxxv 18 from VI 10. The figure is broken—the back view is a restoration.

The *camel* was much more rarely modelled, though bones are common from at least the Second Semitic Period onwards. Figures of this animal are also found from a remote period: they are, however, always uncommon. The head, apparently of a camel, much broken, was found on the rock at the north end of trench 17. The head fig. 207 a, from the north end of trench 1, belongs probably to the Second Semitic Period. Close by were the four cow-legs, fig. 206, already mentioned. Pl. cxxiv 34, from the north end of IV 30, is another example. This pottery figure is covered with white paint. In some of the Byzantine tombs small bronze models of the camel were found, which had apparently been worn as amulets or ornaments: see Pl. cxv 12.

Of the *horse*, bones found in an earlier stratum than the Hellenistic were rare; but models of horse-heads with trappings from the Third Semitic Period onwards shew that it was in use. A fragment of an iron horse-bit, found on the surface of the ground, is probably quite modern. A horse-tooth, ground down obliquely by being used for polishing, was found in III 19. Despite the unnaturally long body, the representation of the mane makes it probable that Pl. cxxv 22 [VI 18] represents a horse.

The use of the horse, and the manner in which he was controlled, is a question calling for consideration here. And first we must consider the trappings of the animal. In fig. 211 are given the heads of nine figures of horses, and part of a head of a donkey, from which some idea will be obtained of the method of guidance. It will be seen that in none is a bit represented, except possibly no. 8 [VI 19]; but this is so rude that its

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\* This may, however, be meant for a camel with its hump: compare Pl. cxxvi 19 [I 6].

explanation is uncertain. Most of the others have more or less clearly indicated a thong passing round the animal's snout; to this it would appear that side straps are added passing round his ears, though this is not invariable. The harness is ornamented with metal bosses, and there are in some, especially in the first two, additional straps whose function is as difficult to understand as is the method of securing them. The reins appear to be attached to the thong on the snout in no. 3; but in no. 5 they are

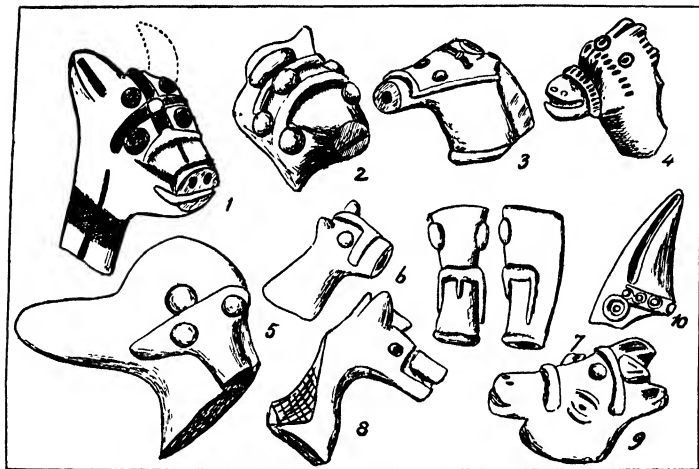


FIG 211—EXAMPLES OF HORSE-TRAPPINGS

attached to a metal-studded collar on the animal's neck. Pl. cxxvi 21 [IV 6] is a more intelligible variety of no. 3. In Pl. cxxvi 8 [VI II] the nose-thong is doubled. The curious trident-like object in fig. 211, no. 7, is to me unintelligible. The last figure, which represents the ear and one eye of a donkey, shews a band with studded ornaments passing round the upper part of the head.

Of these nine figures, the first, which is the most elaborate, comes from early Third Semitic debris in trench 13. It shews the harness ornamented with studs, which are represented by pellets attached to it. One of these pellets, at the inter-

section of the two straps, is knocked off. The parts hatched in the drawing are in the original picked out in dark Indian red. These shew a collar and the reins attached to the band, which in this case is just behind the nostrils. The fragment is  $2\frac{1}{2}$ " long. No. 2, which was found in the cast surface débris north of the High Place and outside the city walls, shews a broad strap with three metal bosses on the forehead: the two additional pellets probably represent the eyes. This figure is 2" long. The third, 3" in length [VI 18], simply shews the reins attached to the strap on the snout. The fourth, also found in the surface stratum, shews nothing but the snout-strap. This figure is  $1\frac{1}{2}$ " high. No. 5 [VI 8] has, as just mentioned, the reins attached to the collar. It is in compact ware, painted red, 3" long. No. 6 [IV 8] is  $1\frac{1}{8}$ " in length. It resembles its contemporary no. 1, but is of a much simpler type. Of no. 7, from the same trench and depth, I have already spoken. It measures  $1\frac{1}{4}$ " long. No. 8 [VI 19] is 2" long. No. 9, which is a simplified variant of no. 1, is from V 6. it measures 3" in length. The donkey's head comes from V 9: it is  $1\frac{1}{4}$ " in length

Of the saddling of horses for riding there is nothing to tell. we cannot, however, infer that they were ridden bare-back, though not even a cloth is represented in any of the figures. Nor was any evidence found to shew whether or not the animals were shod.

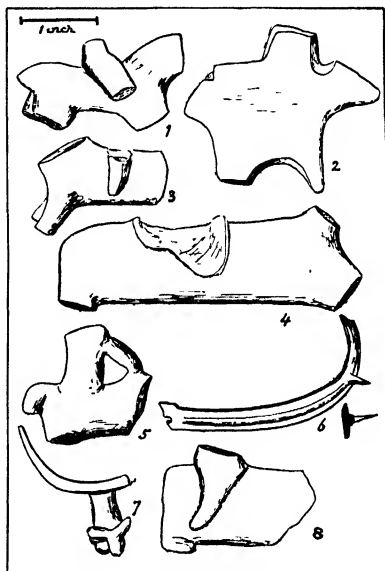


FIG. 212—EXAMPLES OF EQUITATION

The illustrations in fig. 212 are those of riders on horses, shewing the methods of seating. The first is in compact yellow ware, from the surface stratum. The second, rudely cut out from a disc of stone, was picked up in the valley, near 'Ain Yerdeh. The third [VI 28] is in pottery. From these three it is evident that horse-riders sat well forward close to the neck of the animal. In no. 4 [VI 30] the rider is in proportion much farther back, and still more so in the rude bronze fragment



no. 5 [IV 27]. In this last it is not clear whether the oblique bar represents the reins, or the rider's arm. Here the attitude approximates to the modern Palestinian method of sitting on a donkey, almost on the hindquarters of the animal, which is shewn strikingly by a figure from Taanach to be an ancient custom in the country.\* With this accords the fragmentary figure no. 8 [VI 16].

More valuable is a little cylindrical limestone box, found in VI 6, with a rude representation of a horse and rider upon it (fig. 213).

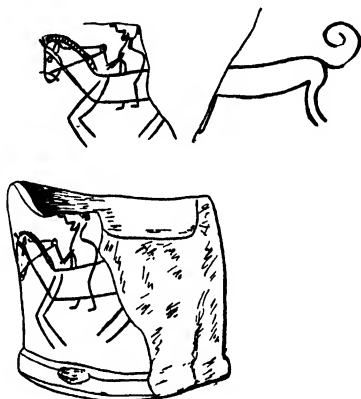


FIG 213.—SUSPECTED "VOTIVE ALTAR" WITH FIGURE OF A HORSE AND RIDER

It is  $2\frac{7}{8}$ " high, and 3" in diameter at the top: the bottom expands, with a moulding round the foot, as the drawing shews, so that it is  $3\frac{1}{4}$ " in diameter. The bottom surface is convex, but the middle of the convexity is sufficiently plane to allow the object to stand steadily. The upper surface bears a cylindrical depression  $\frac{1}{2}$ " deep, with an edge just under  $\frac{1}{4}$ " in breadth all round. The vertical side of the object is smooth, and the greater part of it is quite plain; on one side, however, is scratched the drawing. By the usual perversity of chance, the plain side of the object is uninjured, but a fracture has carried off the middle of the side containing the figures, so that between one-third and one-half of the scene is lost. The missing section is about  $1\frac{1}{2}$  times the length of the surviving part of the hinder animal†

\* Sellin, *Tell Ta'annek*, p. 46.

† To save space the two remaining parts of the drawing are brought closer together, in the development of the design in fig. 213, than they are in the original stone.

The scene represents, first, a human figure—perhaps, as the curves of the body suggest, a woman—riding upon a horse. The mouth of the rider is open. The figure is not a little suggestive of the well-known vase-painting of the Libyan horse-woman from Daphnae,\* and possibly is an artistic descendant of some such original. The horse is not saddled, nor does it appear to be controlled by a bit; instead, a rope is bound round its nose, to which the reins are attached. There is also a headstall between the eyes and ears of the horse, adorned with a knot on the forehead. Among smaller points to notice in this interesting figure are the close-cropped mane of the horse, in which it contrasts notably with the flowing neck-hair of the Libyan woman's mount; and the pose of the rider's hand. The rider, we may note

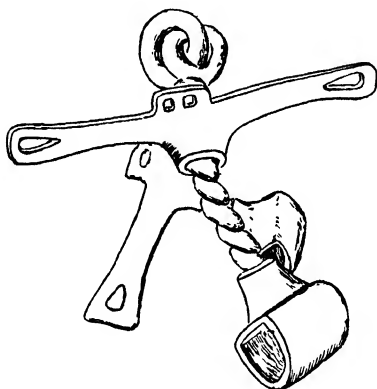


FIG. 214—BRONZE HORSE-BIT

in passing, appears to have learned to control the horse with one hand; the Libyan prototype is holding the reins in both hands.

Behind the figure is an animal, whose spirally curled tail is its only characteristic, and whose species cannot be identified with certainty. It may be a savage beast attacking the horse from behind (similar boxes, as we shall see in a later chapter, bear similar scenes), or it may be a dog following its owner. The curl of the tail has a canine appearance.

On the plain side of the cylinder is a vertical row of little horizontal strokes, resembling the graduations of a footrule, twenty-four in number,  $\frac{1}{16}$ " long and about  $\frac{1}{32}$ " apart. They looked like a minute inscription, but examination with a lens shewed that they were nothing more than strokes.

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\* See Ridgeway, *Origin and Influence of the Thoroughbred Horse*, p. 243.

The method of guidance by a rope tied round the nose of a horse is still common in Palestine. But, notwithstanding the absence of representations, the use of a bit was not unknown. In a cistern in trench 7, which contained a number of early Third Semitic potsherds and bronze objects, as well as some human bones—including those of a man of the unusual stature of 6 feet 5 inches—were found two specimens of the object here figured (fig. 214). The second was identical with that illustrated, but was broken. They consist of two bars, each of them a stout twist of bronze,  $6\frac{1}{2}$ " in length, terminating at one end in a loop interlacing with the corresponding loop of its fellow, and at the other in a shoe fitted on the end of the twist. This shoe bears at its extremity an expansion through which runs a hole, semicircular in section. On the twisted part of each bar is a flat arm, which was movable before it became fixed by corrosion. These arms are also  $6\frac{1}{2}$ " long. Their extremities expand slightly, and are perforated: there is also a narrow projection at the side, just at the middle, with two perforations.

Two fine bronze pots, resembling cooking pots, each with two vertical loop-handles rising above the rim, were also found in the cistern. They are illustrated in fig. 242 b. (See *post*, p. 45.)

The two remaining objects in fig. 212 are representations of spurs, both from the Hellenistic stratum. The first is of bronze, from west of the Maccabaeon Castle: the second is iron, from trench 29. The latter is rather corroded, and it is not clear if it is still in its original form, or whether originally it was not much sharper than it is now.

There is no evidence that any of the three animals last named were used in Gezer for draught. A glance at the plans will make it obvious that chariots could not pass through the crooked, unpaved streets of the town; nor is it likely that the country around was better adapted for wheeled transport than it was within living memory, before the energetic road-making of recent years. The light war-chariots of the Canaanites, of Sisera, of King Ahaziah, recur immediately to mind as a proof that wheeled traffic was not unknown; but it can scarcely have been employed for the purposes of merchandise, which no doubt was transported on animals' backs, as it still is over a great part of the country.

It is difficult to know what to make of the limestone object (fig. 215) which was found among the cast limestone débris between the city walls at the north end of trench 1. The object is 5" long. It has a curious

resemblance to a very rudely cut animal figure; but the nodules of limestone take such fantastic forms by nature that it is most probable that the object is merely an accidental sport. Of somewhat the same kind is Pl. cxxiv 18. This is a nodule of limestone in which an accidental resemblance to a bird has been intensified by a few judicious marks on the surface. It was found in III 19. Analogous again is Pl. cxxvi 9, from V 6. Here the odd shape of a natural pebble has suggested a sphinx to someone, who has added eyes, a hole for suspension, and a

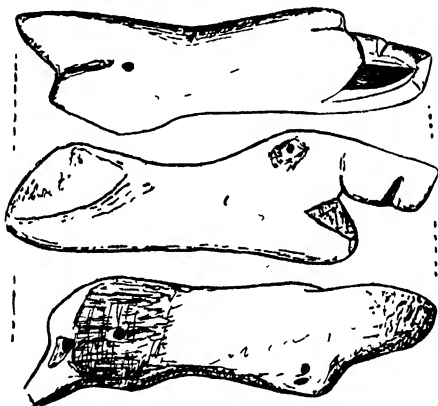


FIG 215—RUDE LIMESTONE FIGURES

nondescript snake-like design on the base, made up of a succession of drill-holes.

The domestic *fowl* was unknown till the Hellenistic period, in the remains of which some bones of this bird were found. The lamp fig. 216 may have represented a duck, but the species is hardly defined enough.

It stands on a trumpet-shaped base, with elliptical mouth, the axes  $3\frac{3}{4}$ " and 4" long respectively: the long axis is rather oblique to the body of the bird. The height of the stand is  $3\frac{3}{4}$ ". The body is 5" long. The back has been modelled separately in two pieces, the point of junction being indicated by a crack, and the indication of wings also has evidently been modelled separately and applied afterwards when the rest was finished. There are holes at the sides of these, apparently for the

insertion of *real* feathers, the potter having had a difficulty in representing these in clay. With the head the whole stands to a height of  $9\frac{1}{8}$ ". A place with broken surface, on the crown of the head, perhaps marks where a plume was affixed. The eyes are indicated by circles, the mouth by a tubular snout.

The grotesque spout Pl. cxxiv 21 also seems to represent a duck's head. In this the shaded lines and patches, as well as the eyes, are painted red. It comes from V 27. Pl. cxxvi 3 also seems to be a duck, but it is fragmentary and uncertain. The upper surface of the body is

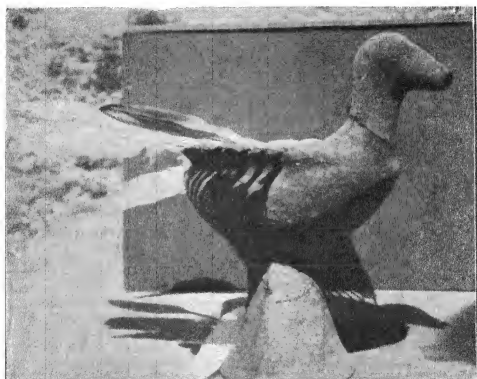


FIG. 216.—POTTERY OBJECT IN FORM OF A DUCK OR SIMILAR BIRD

hollowed into a trough. The neck and head of a goose or swan appear in Pl. cxxiv 10, from Va 28: fig. 16 on the same plate [IV 19] is similar but has a less prominent bill. The ivory Pl. cxxv 9a probably represents a goose. It comes from IIIa 27. On Pl. cxxvi fig. 1 is a figure of a swan, scratched on a thick potsherd, from V 9.

Besides these domesticated animals, a number of *wild beasts* came into the experience of the Gezerites. Bones of the bear, hyaena, wolf, jackal, gazelle, porcupine, badger, and of course the common rodents hare, rat, jerboa, and mouse, were found in every stratum—most of them tolerably common. Stags' antler-tines were often used for the hafts of knives and similar instruments; and Pl. cxxvi 2, from V 6, is a bronze model of a

stag. Moreover a tooth of a hippopotamus was found in the large central reservoir,\* and the teeth of a leopard in the large cistern north of it. A model of a hippopotamus's head from III 3 (fig. 217) may have been

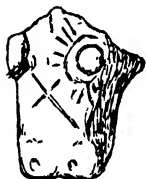


FIG 217—HIPPOPOTAMUS'S HEAD IN POTTERY

copied from an Egyptian representation of the hippopotamus goddess Taurt, but it may also have been suggested to a local artist by a living specimen. On the other hand, figures of apes must necessarily be due to direct Egyptian art-influence. These are not common: one example of an ape's head, from IV 3, appears in Pl. cxxv 23. Of the ibex I can refer to but one certain example—the rude sketch scratched on a combed red potsherd from IIa 30. The screw-like horns of the animal are unmistakeable (Pl. cxxvi 32). But a very similar fragment, found in a rather earlier stratum, is shewn in fig. 218. Though there is no evidence that the Gezerites were personally acquainted with the appearance of the elephant, his ivory was in common use, as will appear throughout these pages.

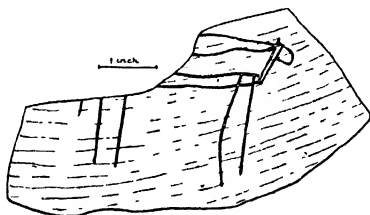


FIG 218—POTSHERD WITH SCRATCHED IBEX FIGURE UPON IT

Fig. 219 represents an ivory boomerang found on the rock: the chord of its concave side is just under 6" long. The small figure Pl. cxxv 3,

\* A hippopotamus tooth, it will be remembered, was also found at Tell el-Hesi (*MMC*, p. 192).

from VI 30, is too rude to determine its species with certainty. It looks rather as though the artist were endeavouring to express his conception of an elephant; but the trunk-like pendant may be the animal's tail.

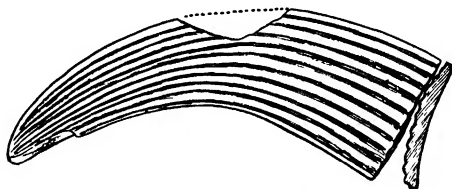


FIG 219—IVORY BOOMERANG

There is plenty of Biblical evidence that the *lion* was known in Palestine during the Hebrew occupation. The only tangible trace of this animal—apart of course from small representations on scarabs, etc.—was

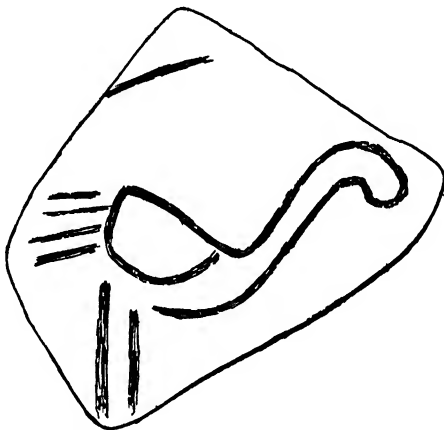


FIG 220—POTSHERD WITH PAINTED OSTRICH FIGURE

the rude head Pl. cxxv 12, which seems to be meant for that of a lion. It comes from the great rubbish heap east of the large central reservoir at the south end of trench 14, and so is of Hellenistic date. With it

should be compared, however, the curious anthropoid head Pl. cxxv 13, from V 30.

Of wild birds, *partridges* and *cranes* were common. The painting of an ostrich on a potsherd of the Third Semitic Period (fig. 220), as well as the occurrence of ostrich eggs deposited with Second Semitic interments, shew that this bird was known to the Gezerites. Fragments of the shell of an ostrich egg adorned with a decoration in white paint, were found in V 12 at the south end of the trench. The three largest of these are shewn in fig. 221. Several smaller fragments were found, but it was impossible to fit any of them together. It is unnecessary to illustrate these, for most

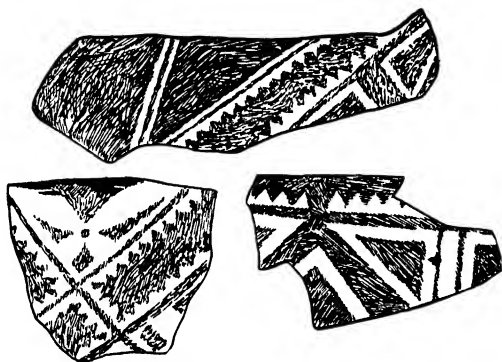


FIG 221.—PAINTED FRAGMENTS OF OSTRICH-EGG SHELL

of the smaller fragments bear no device; and those that are decorated merely bear repetitions of the fragments of patterns on the three specimens illustrated. The head of the figure of a long-beaked and -necked bird (? a *crane*), from the south end of Va 27, will be seen in Pl. cxxv 26. Leg-bones of the crane were frequently trimmed and pointed to make prickers. The torso Pl. cxxiv 24 [V 27] probably is that of a dove. A similar but larger example, from VI 29, is figured in Pl. cxxv 10. A figure of a dove (?) with expanded wings, on a trumpet-shaped pedestal, appears in Pl. cxxvi 10. It came from the Fourth Semitic Period. Several specimens of this type of object were found in this period, but all were fragmentary.



Of course *saurians* and *invertebrata* were as much in evidence as they are now, but very little notice seems to have been taken of them. The only representations of invertebrata that were noticed were the (possible) millipede on the wall of cave 30 IV, already described (Vol. I, p. 148), and the curious mark on a bowl of the Third Semitic Period, which *may* represent the potter's idea of one of the common tarantula spiders (fig 222). Among representations of saurians the most important is the bronze cobra found in the High Place and described in Chapter X. There may also be mentioned a potsherd with a representation of a snake in relief upon it, which was found north of the temple alignment, right over the inner

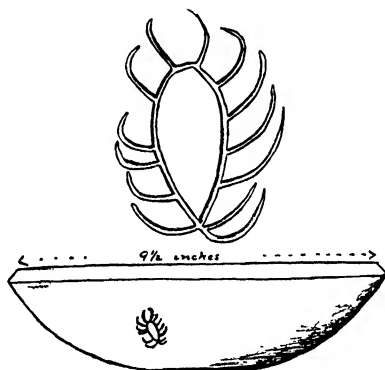


FIG 222.—BOWL WITH SUPPOSED FIGURE OF A SPIDER

city wall, immediately under the surface of the ground. The sherd from II 19 (Pl. cxxiv 26) with two serpents is similar in type, and Pl. cxxiv 27, from VI 16, is probably a serpent's head. Bits of *tortoise* shell were very frequent but nothing manufactured of this material came to light. There were a large number of bones of *tunny* and other fish, no doubt imported for food,\* and, from the earliest times, a considerable variety of shells (principally *cardium*, *buccinum*, *murex*, *anodonta*, and *bulimus*)

\* Fish were taken, at any rate sometimes, with a hook see *post*, p. 87. In IV 29 were found the ribs and vertebrae of a small fish which had somehow become embedded in a sun-baked brick

brought up for ornamental purposes. A large mass of oyster-shells was found just west of the High Place pillar-stones on the rock. Elsewhere a small *tridacna* shell came to light. A fragment of cuttle-bone was found in **V 18**; and the tubular "house" of a *serpula* in **III 28**. The latter was of a strange contorted form, and possibly was brought into the city to serve as an amulet.

Not only whole shells, but also portions—sometimes highly polished—were used for ornament. Beads cut out of pieces of whorl-shells were common, also the central axis of large specimens of *buccinum* and similar whorled shells. The use of fragments of shell as *inlays* is also to be noticed.

And while mentioning marine ornamental products, we may make a passing reference to *coral*, fragments of which, both red and white, were occasionally found. Thus, a fragment was found in **IV 11**. None of these pieces were polished, and I have no note of any example of a *worked* piece of coral having been found, except a pendant of red coral with a minute hole drilled for suspension picked up on the surface of the mound, and another with a rude face cut upon it from the Hellenistic stratum, represented in Pl. cxxvi 18; also the coral baetyl figured Pl. ccxxiv, 13.\* That the rough bars of coral were worn as prophylactics against the Evil Eye is very probable.

A disc of unbaked clay, with a rosette-like pattern, was found in **V 28**. This was unintelligible till a happy inspiration identified it as the impression in mud of a starfish.

The natives of the Hellenistic Period seem to have been fond of *snails* as an article of food. Here and there large piles of the shells of these creatures were found, which can be explained only as midden heaps. It is noteworthy that this delicacy was not appreciated in the pre-exilic epoch, for no such piles appear in any of the earlier cities. A notable example of these midden heaps is the small circular structure **VI 21 A**, which apparently was built in the Fourth Semitic Period and therefore appears on both maps. It probably was used as an ashpit, and contained a great quantity of snail-shells and some sherds of very characteristic Hellenistic pottery.†

In **III 30** a pile of cockleshells, heaped up in the bottom of a broken

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\* Some coral beads were unearthed at Tell es-Safi.

† The modern natives of Lebanon are fond of snails, but I believe the fellahin of S. Palestine, though not as a rule "squeamish," regard this diet with disgust.

jar, was found. These had probably been used for food. It is illustrated in Pl. cxxvi 6.

Besides recent shells, fossils such as ammonites were occasionally found, which must have been picked up and brought into the city, perhaps for ornaments or for amulets. The fossil *echinus* was found fairly often; half of one, split longitudinally, polished, and perforated came to light in III 11. In VI 30 was found a nodule of limestone cut to imitate this fossil.

When all the animal figures that can be identified are set aside, there remains a curious collection of rude nondescripts, the species of which it is impossible to identify. They are common everywhere: Plate cxxiv 5, 12, are examples.

Pl. cxxiv 13 and Pl. cxxvi 13 are in bronze—not a very common material for objects of this class. They were thrown out by a workman's oversight and afterwards found on the waste earth, so their strata cannot be assigned. Compare fig 22 (Vol. I, p. 76). Probably like most bronze figures of the kind they are of Egyptian origin; and most likely came from a late stratum, as the similar bronze Pl. cxxiv 33 came from VI 29.

The remarkable head represented in two aspects in Pl. cxxiv 15 *a, b*, is carved from a piece of bone. It came from IV 19.

The small rude figure Pl. cxxv 25 is in stone. It is simply a block with an indication of a head at one end and a ridge to represent the tail at the other. The length is  $3\frac{1}{4}$ ", the breadth  $1\frac{1}{4}$ ", and the height  $1\frac{1}{4}$ ". It came from III 2.

Pl. cxxiv 38 is a remarkable object of alabaster which was picked up on the surface of the ground. It appears to be a Janiform representation of two animal heads. what its purpose may be is not easy to say. The eyes, represented by small holes, are shewn in one of the heads but not in the other.

On Pl. cxxv 7 is a grotesque little animal figure, with enormously exaggerated paws. This was found in V 29. It is evidently intended to be thrust into the side of a vessel, in order to make a handle.

## § 26.—CEREALS AND FRUITS: THE AGRICULTURAL YEAR

In a previous chapter we have mentioned the existence of large stores of charred grain and fruits, which have given us important information as to the cereals in use in the ancient city.

In this way have been found wheat, barley, oats; *kursennu* and *jalbānu* (two species of vetch, of about the size of a pea, used for camel food), *kuḫbi* (a small-grained vetch), beans, *bāmīeh* (*Hibiscus esculentus*); piles of *tībū* (chopped straw used for fodder, as in modern Palestine); and also figs, grapes, pomegranates, and olives. At the bottom of trench 10 were found the charred remains of what appeared to have been a pile of

pistachio nuts. Acorns, terebinth, and apricot seeds were also found, the last in Second Semitic debris.

This grain was either piled up on the granary floor or stored in large jars. The species were usually kept separate, though often wheat and barley were mixed together, apparently with intention.

An important result follows from the examination of the above list of cereals; namely, that the agricultural year at Gezer was not identical with that of modern Abū Shūsheh. In the latter the first of the winter rains, about November, is the signal for the beginning of activities; the rotation of labour then proceeds in the following order (with occasional slight modifications dependent on the climatic conditions of the year):—

Rainy Season	November	. Sowing <i>kursenni</i> and ploughing for wheat.
	December	Sowing wheat and ploughing for barley.
	January	Sowing barley
	February	. Ploughing for the summer crops
	March	" " " "
Dry Season	April	. Reaping barley.
	May	. Reaping wheat.
	June	. Sowing summer crops (millet and sesame).
	July	. } Reaping millet and sesame
	August	. }
	September	. } More or less idle, except where there are olive-groves
	October.	. } to attend to.

The important point to notice with regard to the above table is, that the summer crop, fed with the heavy night dews, was unknown in ancient Palestine\*. No summer seed was found in the whole excavation. On the other hand, the countless rock-cut oil and wine presses, both within and without the walls of the city, shew that the cultivation of the olive and the vine was of much greater importance than it is anywhere in Palestine to-day. Among the bare rocky hills around, such as are shewn in the photograph, Pl. ix, fig. 1, many presses are to be met with—a sure sign that these hills were once green with olive- and vineyards. Islām, with its prohibition of wine, has, of course, discouraged and all but suppressed the cultivation of the grape among its followers, a result to which the modern substitution of sugar for grape-treacle (دبس, دجش) the “honey” of Gen. xliii 11 and elsewhere), has also no doubt contributed, and excessive taxation† having made olive culture unprofitable, the trees that we can without difficulty imagine in thick groves round the ancient city have vanished, till a few individuals alone remain. No doubt the labour of the

\* The “sesame” found in Tell el-Hesi (*MMC*, p. 110) was more probably the fine-grained species of vetch known as *hulbi*, of which one store was discovered at Gezer (in IV 27 A).

† The above paragraph was written before the constitutional changes of 1908.

vineyards fully occupied the Gezerite agriculturists during the months which their successors devote to millet and sesame.

The conclusions thus indicated by a consideration of the remains of granaries, were remarkably and unexpectedly corroborated by an inscription found in trench 8 at its northern end, in Fourth Semitic débris. From the general style of the pottery and other antiquities found in association with it—unfortunately scanty—I assigned the sixth century B.C. as its date, and with this conclusion the Rév. Père Vincent of the Dominican École Biblique in Jerusalem agreed. Other palaeographers, however, regard it as being earlier by two centuries, which would give the writing the further interest of being the oldest Hebrew inscription as yet known.

The inscription is scratched on a tablet of limestone (see Pl. cxxvii), 4½" high, 2½" across, and ⅝" thick. The lower part is broken off by an oblique fracture, and is lost; the fracture passes through a square hole, apparently meant for a peg by which the stone was affixed to a wall. The reverse side of the tablet, except for one or two meaningless and perhaps accidental tool-marks, is plain, as is also the right-hand edge. There is another hole on the back, just above the fracture, communicating with the broken peg-hole already mentioned. The left-hand edge is covered with a fret of diagonal lines, five or six to the inch.

The present is not the place to discuss the various suggestions on the philology and palaeography of the inscription, about which quite a small literature has come into being. There are seven lines in the writing, with the remains of an eighth line written vertically and interrupted at the fracture. Prof Mark Lidzbarski of Greifswald, Prof Buchanan Gray of Oxford, and Mr. E. J. Pilcher, discussed the tablet shortly after its discovery (*QS*, January 1909, p. 26). They were followed by Père Seb. Ronzevalle, S.J., of the University of Saint-Joseph, Beirut, Prof. Dalman of Jerusalem, and Dr. S. Daiches in the same journal (*ib* p. 107), Père Vincent (*Revue Biblique*, 1909, pp. 243, 493), Prof Marti (*Zeitschrift f. Alttest. Wissensch* 1909, p. 222), and Mr. S. A. Cook (*QS*, 1909, p. 284). The rendering of the inscription proposed by the first of these is as follows:—

- |         |         |     |
|---------|---------|-----|
| יִרְחָא | יִרְחָא | (1) |
| רַע     | יִרְחָא | (2) |
| יִרְחָא | פֶּשֶׁת | (3) |
| יִרְחָא | קֶצֶר   | (4) |
| יִרְחָא | קֶצֶר   | (5) |
| יִרְחָא | זֶמֶר   | (6) |
| יִרְחָא | קֶצֶר   | (7) |

- (1) Month of the fruit-harvest—Month of
- (2) the sowing—Month of the after-grass—
- (3) Month of the flax-harvest—
- (4) Month of the barley-harvest—
- (5) Month of the harvest of all [the rest]—
- (6) Month of the pruning of vine-plants—
- (7) Month of the fig-harvest—
- (8) — ?

—most of the letters being clear, save a few doubtful signs, especially one marked Y in the above scheme. Prof. Buchanan Gray offers a reading which, as revised (QS 1911, p. 161), is in substantial agreement: in line (1) he has **חמץ**. In line (2) at the end he gives **ולקש**, and at the end of (5) **ותל**, all three letters being marked doubtful: line (6) he makes **ירח וזר**. His interpretation is similar to that of Prof. Lidzbarski, though naturally differing in verbal details. The third character in line 8, left undeciphered by Prof. Lidzbarski, he makes a doubtful ' ; and translates the whole thus —

- (1) A month and ingathering—A month and sow-
- (2) ing—A month and the spring-gathering—
- (3) The month of the pulling up(?) of flax—
- (4) The month of the reaping of barley—
- (5) The month of the reaping of (?)—
- (6) A month and pruning—
- (7) The month of summer fruits
- (8) [Abi]

Mr Pilcher thinks that the lines are incomplete, the initial half of each being broken off. This is, however, impossible. His transcript differs thus from Lidzbarski's—line (1) **חמץ** and omit two letters after the second **ירח**, line (2) begins **מע** and ends **מקש**; line (4) ends **שער**; line (5) ends **ל\*\***; line (6) **נור** for **זמר**; line (8) is omitted altogether. The interpretation is similar to Prof. Buchanan Gray's except that he reads "of cucumber-field" instead of "and the spring-gathering" in line (2), "winnowing" for "pruning" in line (6), and "Month end" for "The month of summer fruits" in line (7).

Prof Ronzevalle, who strongly holds to the older date for the inscription, proposes an ingenious interpretation, which offers an explanation of the difficulty that the inscription is apparently complete, and yet enumerates eight months only. He would translate it thus —

- (1) A month and storage—A month and sow-
- (2) ing(?)—A month and hay-harvest—
- (3) A month of the harvest of flax—
- (4) A month of the harvest of barley—
- (5) A month of threshing and of measuring—
- (6) A month and pruning [of the vine]—
- (7) A month of interruption

—reading the doubtful character Y as J throughout. The formula “a month and—” he interprets as meaning “a month [passes] and [then comes] the agricultural process described,” which lasts a month, more or less. There are four repetitions of this formula, which swells the eight items into twelve months. Prof. Ronzevalle, however, is careful to explain that in his view the inscription is not a calendar, but a record of the rotation of the annual agricultural labours, drawn up for some obscure administrative purpose.

Père Vincent, in the *Revue Biblique* article above referred to—where will be found an admirable photograph of the tablet—proposes a reading differing in certain details from that of his predecessors. The Y-mark he reads as J, affixed to the end of ירח rather than the beginning of the following word: thus for ירח ואסף in line (1) he reads ירן ואסף, “two months of the late crops.” This Aramaism, however, has not been accepted by more recent writers on the subject; but it will be noticed that it gives a *sense* similar to the result of Père Ronzevalle’s interpretation. At the end of line (1) again he reads ירחן ורע, the last two letters being at the beginning of the second line. Line (2), likewise, proceeds ירחן לקש. In line (4) Vincent adds, at the end, a doubtful ה. Line (5) he reads ירח קערן כלם, the final ם being the character read by Lidzbarski at the end of the preceding line (it is actually written on a level between the two). Again Vincent reads line (6) ירחן זמר. The interpretation of the inscription he makes is:—

- (1) Two months, late crops [*récoltes tardives*].—Two months,
- (2) sowing—Two months, spring crops—
- (3) One month, cutting of flax—
- (4) One month, harvest of barley—
- (5) One month, all the harvest—
- (6) Two months, fruits [vines]—
- (7) One month, summer fruits

In the accompanying article he offers an elegant comparison between the agricultural year and that of the modern inhabitants which, as it depends on unchanged natural conditions, must necessarily be analogous. Prof. Dalman offers criticisms on Lidzbarski’s rendering in *QS*, 1909, p. 118: reading (with Gray) *ingathering* for *fruit-harvest*, and objecting to *after-grass* in line (2). Like Vincent, he also gives a comparison with the modern year; but differing slightly. It is interesting to compare the two schemes. Vincent begins his *récoltes de l’arrière-saison* on the 15th September, and proceeds regularly, by intervals of one month or two, to the 15th September in the following year. Dr. Dalman’s scheme is as follows:—

Oct.—ingathering.

Nov.—missing, perhaps indicated by the vertical stroke in the writing.

Dec.—sowing.

Jan.—as November.

Feb.—late sowing, or preparing fields for summer seeds

Mar.—flax

Apr.—barley.

May—"harvest of all," i.e. when there is harvest over all the country.

June—vines.

July—fruits.

Aug } not accounted for ; perhaps lost with the fracture of the tablet, or else  
Sept } indicated by the 8, 2, in the margin.

As to the date of the inscription, opinion seems about equally divided Lidzbarski, Gray, and Ronzevalle, all are in favour of the eighth century ; Vincent, Marti, and, less positively, Cook decide for the sixth

That the tablet is a *palm-pest* was first suggested by Lidzbarski from an examination of the photograph, and maintained by Vincent, who saw the original tablet, and by Cook from a good cast I cannot admit that I am convinced of this, or that the additional marks are any more than the tool-marks made in shaping the tablet : possibly some of them may be mistakes of the scribe corrected by himself

The purpose for which the tablet was made is quite obscure, and opinions are divided as to whether it was the work of a peasant or of a local official scribe ; the roughness of the lettering being in the latter case explained by his having to deal with the unfamiliar medium of stone and graver rather than parchment and pen. There is no reasonable explanation for drawing up a bare catalogue of the annual rotation of agricultural labour—a piece of knowledge which every child in the country learns at least as early and quite as efficiently as the educated children of Europe learn their A B C. There is nothing historical, votive, epistolary, talismanic, or magical in the inscription. It is of too formal a character to be classed with the random scribbles by which a writer tries the capacity of a doubtful pen. I see no admissible alternative to the conclusion that the tablet was prepared by the writer simply to shew off his own attainments. Abi\*\*\* (it is a pity we do not know his full name) was a person of a limited range of ideas, but he possessed the unusual accomplishment of writing On the wall of his hut he suspended a list of months he had written, to which he would no doubt proudly call the attention of his less gifted friends. In precisely the same way, any modern fellah who has somehow acquired a few words of Turkish or French is always as delighted as a child when opportunity offers to air them.

On the whole the agricultural year of modern Gezer is reproduced on this tablet, with the striking exceptions already mentioned—the absence of sesame and millet, and the much greater prominence given to fruit.\* The most noteworthy detail, however, is the mention of *flax* This is not now grown anywhere in the neighbourhood, not even in the highly developed agricultural establishment of the Trappists at Latrûn ; nor were any flax seeds discovered in the Gezer granaries. The inscription, however, does not *necessarily* imply what we would naturally have

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\* The same conclusions might be deduced from the many agricultural allusions in the Bible, both Old and New Testaments. The *details* of modern fruit-culture are different. vines are considerably less important than in the days of ancient Gezer, and olives and figs also are probably not now so extensively cultivated On the other hand, several fruits new to the country, such as the prickly-pear and the orange, have been introduced and are now among its most important products.



inferred, that the labours indicated were those of the *Gezer* agriculturists: the month may have been called the "month of flax-harvest" even in a district where flax was not actually grown.\*

### § 27 — THE PREPARATION OF FOOD

Under this heading we must describe the implements used in the following processes:—

- (a) The obtaining of grain and preparation of bread
- (b) Cooking and serving meat, broth, vegetables, etc
- (c) Drawing and carrying water.
- (d) Expressing olive oil and other fruit-juice.
- (e) Filtering and refining liquids

It need hardly be said that only those parts of the various implements that were made of permanent material—bronze, pottery, and stone—could possibly survive: the wood has disappeared long ago. This will naturally restrict the variety of objects to be described from the excavations.

#### (a) *The Obtaining of Grain and Preparation of Bread*

As a preliminary to the study of the processes of ploughing (the initial labour in the obtaining of grain) it would be natural to consider the lands owned by the city, their extent and subdivisions, and the conditions of their tenure. On these subjects, however, we have practically no information except the contract tablets and the boundary inscriptions, described in Chapter I. These are unsatisfactory, because the former probably reflect the customs of a temporary foreign occupation rather than those of the native Gezerites, and the latter are of too late a date to be of much service for our present purpose. On the hillsides are to be found many fragments of old territorial boundaries, in the shape of irregular alignments of boulders, averaging about 2' or 2' 6" in all their dimensions, and roughly about 5'-10' apart. These are now very imperfect, having been largely smashed up to feed the local limekilns: the villagers have no traditions about them, and there is nothing to indicate whether they are fifty or five thousand years old. The lands of the modern village are divided into 110 parts, the winding boundaries of which are traditionally known with minute accuracy, though not marked by any indication visible to a stranger.† Every one of these parts has its name: those immediately

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\* In 1573 the German botanist Rauwolff found *cotton* grown in the fields round Ramleh. This is no longer cultivated there.

† In the map (Plate viii) I have not attempted more than an indication of the relative sizes and positions of the land-divisions that fall within its limits. To have surveyed the boundary-lines exactly would have involved a serious and purposeless waste of time.

surrounding the *tell* are indicated in Plate viii. But, as I have already said, none of these names bears any indication of high antiquity: they are either roughly descriptive ("The Valley-side" and the like), or else they bear the names of plants or animals supposed to be found in the spots indicated, or are called after people who were alive in the nineteenth century. See Vol. I, p. 5.

The Preparation of Bread involves the processes of ploughing, sowing, reaping, threshing, winnowing, grinding, kneading, and baking. The implements essential to these various parts of the labour are: for *ploughing*, a plough with its several parts, and an ox-goad; also a rod (usually the handle of the ox-goad) for measuring the land allotted to the individual ploughmen. For *sowing*, in certain cases a tube is used, shaped like a long

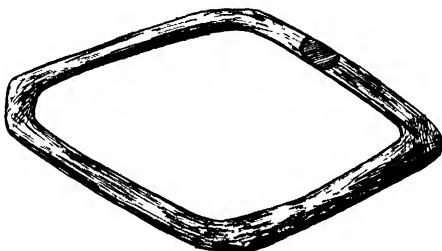


FIG 223—IRON RING, POSSIBLY PART OF A PLOUGH

bottle-filler. This is attached to the plough-handle, and the ploughman drops the seed through it as he proceeds: the two processes are thus combined into one. Otherwise nothing is required but a bag to hold the seed—generally extemporized by the labourer's holding up the skirt of his tunic. For *reaping*, a sickle is required; for *threshing*, a threshing-sledge, though this may be dispensed with; \* for *winnowing*, a winnowing-fork; for *grinding*, mill-stones; for *kneading*, a kneading-trough; and for *baking*, an oven, or, in its absence, a baking-tray. Let us now take these various implements in order.

Of ploughs, or of the metal parts of ploughs, no certainly recognizable ancient specimen was found. In the earth above the great Central Reservoir, almost the only object found was the rusty iron share of a wooden plough, apparently modern, though of workmanship superior to the ploughs ordinarily

\* It is curious that in Abû Shûsheh the threshing-sledge is never used, though employed in the not far distant village of Safirlyeh.

in use in the village. This had perhaps been stolen from the German land-owners at some time, buried, and then forgotten, or for some other reason never recovered by the thief. From the iron age onward, it is probable that ploughs resembled the primitive instrument still in use in Palestine. In the earlier period other means must have been employed to break up the earth, iron-bound by the long summer drought. It seems likely that iron was first used for agricultural instruments, bronze being retained for domestic and ornamental purposes in which a hard metal was not so essential. In the Fourth Semitic and Hellenistic Periods a few massive lozenge-shaped rings



FIG. 224.—IRON HOE

of iron were often found, of which fig. 223 is an example: it measures  $7\frac{3}{4}$ " by 4". These may be part of the fastenings of a plough.

That some form of ploughs was used, drawn by animals, is indicated by the discovery of certain objects, in both bronze and iron, that may reasonably be identified as the heads of ox-goads. In the normal form, a heavy but blunt spike of bronze terminates below in wings which are bent round to form the socket into which runs the head of the long staff. These are almost always made of bronze: an iron specimen, however, was found in VI 20. This normal type is figured in Pl. cxxviii 1, 2.

There are occasional varieties. The bronze chisel-like object Pl. cxxviii 3, from the cistern in IV 18, seems intended for too clumsy a handle to be a true chisel, and is probably to be regarded as an ox-goad. The iron implement Pl. cxxviii 4, which comes from the Hellenistic stratum, is

to be explained in the same way. It approximates more than the others to the modern shape of ox-goad, and it is evident that the sharp point given by the oblique edge would increase its efficacy. It is possible that the four-sided spike of iron, flanged to be set upon a split stick, that was found on the surface of the rubbish between the walls of the alignment, is also to be explained as an ox-goad. See Pl. cxxviii 5.

Besides the plough, whatever its shape may have been, it is probable that other and more primitive and laborious means were used to break up the soil. The heavy iron socketed hoe Pl. cxxviii 7 was probably

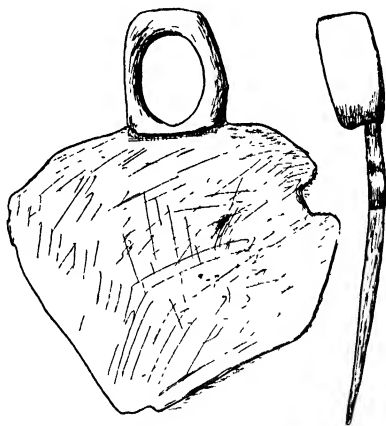


FIG. 225—IRON MEJRAFEH

employed for some such purpose, like the old *cas-chrom* of the Scottish Highlands. It was found in the Hellenistic stratum. Another type from the same stratum appears in fig. 224. This may possibly be a carpenter's tool (adze or chopper), but it is more like a hoe.

It was a surprise to find, in IV 12, the head of a *mejrafeh*, or right-angled hoe, identical with that in daily use in the excavations. Indeed, I first thought that an old *mejrafeh* from the works had somehow been imported into the trenches, to be palmed off as an "antiquity." But as the labourers had learnt by severe lessons not to play such tricks, and

as I was able to obtain clear assurance that the object had actually been found in the place indicated, it may be taken as genuine evidence of the antiquity of this Palestinian tool. Being adapted for pulling the earth towards the workmen, the *mejrafeh* is used for drawing it into baskets for removal.\* See fig. 225. The blade of this specimen (exclusive of the loop for the handle) measures  $7\frac{3}{4}$ " by  $4\frac{7}{8}$ ".†

For reaping, a hand-sickle was used from the first, as it still is in this country. It has, however, gone through several changes both in shape and material.

The earliest sickles were made of flint teeth of rhomboidal shape, so cut that a row of them made a gentle and regular curve. These flints were given a fine serration by chipping and retouching along the edge. The handle in which they were set was curved to follow approximately the curve of the flint edges: the flints projected from this haft about half an inch or less; the exposed parts of the edge are always polished brightly by use. The angle to which they are cut is fairly uniform—about  $80^{\circ}$ —as the drawing of a sickle of flints Pl. cxxviii 9 shews. This was made up from a number of specimens selected at random, from a pile which included flints of all types and ages heaped indiscriminately together.

There are three kinds of flint sickle teeth, which may be called butt teeth, central teeth, and point teeth. In the central teeth, to which kind naturally by far the largest number belong, the flint is serrated along one edge only of the rhombus, except so far as chipping may be necessary to bring it to the required shape. The butt teeth are similar, save that the serration is returned round the exposed angle. The point teeth are triangular in shape, being adapted to form the point of the sickle. The distinction is shewn in the drawing of a series just referred to.

The theory has been put forward that this type of sickle was suggested by the contemplation of the jaw of some ruminant, and that the flints may have occupied the place of the extracted teeth in an actual jaw of this nature. (See Mr. Spurrell's appendix in *MMC*, pp. 195, 196) I venture to think that this suggestion has been made without a practical experiment to test whether it be feasible. The instructive photograph fig 226 represents an attempt to reconstruct such a sickle with a rather

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\* It is used in field and other digging work in preference to the spade, the people being accustomed more to the pulling action of the one than to the casting action of the other. In fig. 79 (Vol I, p 191) there is a labourer leaning on his *mejrafeh*, about 1" from the right-hand margin of the picture.

† Though found in IV, it probably belonged to V, having been buried and forgotten. An iron tool of the kind would hardly be expected so early as the Third Semitic stratum.

large camel's jaw. There is room in the sockets of the molars for only three -flint teeth, and *the jaw does not follow the curve natural to the teeth*, such as is shewn in Pl. cxxviii 9.\* Except the sockets of the molars, there is nowhere else in the jaw where flint teeth can be fitted, the edge being too narrow, and the whole texture of the bone being such that none could be forced in without splitting it. The idea of flint sickle teeth being used in an unworked *bone* handle may therefore, I think, be put aside.

Flint sickle teeth are found in numbers through all the Semitic Period. That they were used in the Neolithic Pre-Semitic Period is doubtful, such



FIG. 226.—JAWBONE WITH FLINT SICKLE-TEETH INSERTED

examples as may have been found in the caves being possibly to be ascribed to the first Semites who settled in the mound. At the other end of the history, they are unknown in Hellenistic times, and rare in Fourth Semitic. Probably they were used throughout the bronze age because they were less expensive than, and at least as efficacious as, sickles made of that softer and easily blunted metal: not till iron came into general use were they completely superseded.

Bronze sickles, therefore, are rare in Palestine. I give one example

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\* See also *MMC*, p. 124, figs. 251-254, which, however, shew point teeth at each end of the sickle.

(Pl. cxxviii 8) from the topmost stratum. It is narrow—in this respect not unlike the modern Palestinian sickle—and the end probably fitted between two hafting-plates. The end of this specimen became accidentally bent before the hafting-plates were removed. There is no rivet-hole in the bronze, so that the hafting-plates must simply have been bound together tightly with a thong, or by rivets that did not pass through the blade of the sickle.

Iron sickles are much commoner, though confined to the Fourth Semitic and Hellenistic strata. Several varieties are in use, differing in breadth and in the manner of attaching the handle. The breadth of the blade ranges from  $\frac{3}{4}$ " to  $2\frac{1}{2}$ ", though the extremes of this range of dimension are both rather rare: about  $1"-1\frac{1}{4}"$  is the commonest breadth. Small specimens are found, apparently complete, that shew no evidence of the method of securing the handle (as Pl. cxxviii 12): in this case, as in the bronze sickle just mentioned, the handle must have consisted of two hafting-plates secured together by thongs. A remarkable and rare variety (Pl. cxxviii 13) shews the beginning of a tang, set at an angle to the blade. In another (Pl. cxxviii 11) rivet-holes shew that the handles consisted of hafting-plates secured together by metal pins. A fine and curious example from the west end of the Maccabaeae Castle forms another variety: here flanges at the lower end of the blade are folded tightly together to make a tang, which was presumably thrust into a wooden or bone handle (Pl. cxxviii 10). Socketed sickles are less usual, though not unknown. An example, broken at the end, is shewn in Pl. cxxviii 6. This may, however, be some kind of pruning-knife.

The processes of threshing and winnowing received no illustration from the excavation. A threshing-sledge (אֶבֶן) was used by Araunah at Jerusalem (II Sam xxiv 22), but being of wood such an instrument naturally could not survive. It is not impossible that some of the flint chips found were teeth of threshing-sledges, which in South Palestine are now made of iron. Winnowing-forks also were, no doubt, made of wood, as they still are in Palestine (though iron forks have been introduced), and likewise cannot be expected to survive.

The number of illustrations of the methods of cultivation and extraction of grain recovered from the excavation are thus comparatively few; but when we come to the methods of its preparation for food, we are confronted by a large series of objects which give us full information as to the processes followed.

Grain was ground to flour by rubbing or by pounding; the latter

being the method most commonly followed,\* to judge by the relative frequency of the different types of apparatus.

For rubbing, the instrument generally used was the saddle-quern. *The rotary hand-quern, in the form used in modern Palestine, and in remote European regions such as the Hebrides, is quite unknown throughout the whole history, even down to the time of Christ.* It is most important to note this fact carefully. The popular illustration of "two women grinding"—a photograph of such a scene as may be observed in any village of modern Palestine—is misleading as an illustration of the well-known passage in Christ's eschatological discourse, Matt. xxiv 41; one of many cases where the past cannot be seen *exactly* in the present.



FIG. 227.—THE SADDLE-QUERN

The saddle-quern consists of two stones, the "upper" and the "nether" millstone. They are usually made of the hard porous lava or basalt of the Hauran, which gives a sufficiently rough surface for the purpose, though owing to the numerous holes and indentations the flour made cannot have been very fine.† This, no doubt, produced grits in the bread, and probably is a prime cause of the worn condition of the teeth found in skulls in the excavation.

The nether stone, the shape‡ of which gives its name to the instrument (fig. 227), is about 1' 7"-2' 8" long and 0' 10"-1' 4" broad. The upper surface is hollowed slightly, usually with a straight margin across one end. The upper stone, which is such a stone as the heroine of Thebez cast on the head of Abimelech (Judges ix 53), is a long oval

\* The two methods are referred to as alternatives in Num. xi 8 (describing the treatment of manna).

† The nether stone is always made of this material. The upper stone is sometimes made of softer stones—granite, conglomerate, or shell breccias; hence the *nether* millstone is the type of firmness in Job xli 24 (xli 16 in the Hebrew numeration). Of the "two women," one fed the mill while the other manipulated the rubbing-stone.

‡ That this shape was suggestive of a saddle to the Hebrew writers is perhaps shewn by their expression רֶכֶּשׁ מִלִּינִי "riding millstone," for the *upper* stone (Judges ix 53, etc.).



in horizontal section and plano-convex in vertical section—though as a result of protracted use the stones develop pendent horns at the end, the central part of the plane surface becoming in process of time worn away. In the earliest specimens (Second Semitic Period) the upper stone is long and narrow, the ends brought to a fairly sharp angle. It gradually broadens as we proceed in history, and in the Fourth Semitic Period is at its broadest stage—indeed some examples of this period are almost as broad as long, very few project beyond the sides of the nether stone, and the points are always blunt. In the Hellenistic Period there is another shape—with a rectangular horizontal section, and a trapezoidal vertical section; the ends being cut square. They are straight, narrow, high-backed, and as a rule are shorter than the earlier specimens. In this period also there appear small rubbing-stones of breccia, of a convenient size to be grasped with the hand. In the Fourth Semitic and Hellenistic Periods we often find

small hand-rubbers of rough stone, measuring 4"-8" in length and  $2\frac{3}{4}$ "-6" in breadth. It is not likely, however, that these are all meant for grinding grain.

The great size and weight of the nether stone would prevent its being removed easily from place to place. On the other hand, the upper stone is easily transported, and of course the mill is useless without it, hence the prohibition in Deut. xxiv 6 against taking the *upper* millstone as a pledge. It is noteworthy, however, that very often two upper millstones were found associated with one nether. As these could scarcely be used simultaneously, this was probably to provide against emergency in the case of a stone getting lost or broken. A fragment of an upper millstone was found in V 20, which had a deep groove longitudinally on the plane face. This probably merely means that the stone was used



FIG. 228.—THE ROTARY QUERN

for sharpening tools after it had been broken and so rendered useless as a millstone.

Another instrument for grinding is the nearest approach to the rotary quern that the excavations afford. It consists of two stones with plane faces, which lie in contact: the face of the nether stone has often a raised collar inside of which the upper stone fits. A conical tenon in the middle of the face of the lower stone fits into a similar-shaped mortice in the upper: round this tenon the upper stone is rotated (fig. 228). These stones are almost always of small size, and are made of smoother stone than the saddle-querns. They were probably rotated in half-circles, backwards and forwards, by being grasped in the hands and turned with backward and forward motion.

of the wrist. There is never a second hole for the insertion of a turning handle: this seems not to have been introduced in Palestine till after the early Arab period. Specimens of this instrument were found at Tell Mutasellim, and are described by Schumacher as paint-grinders, which is a not unreasonable explanation. The range of time over which these implements are used is the Third and Fourth Semitic Periods. There is often a collar surrounding the grinding surface of one of the stones into which the other fits: fig. 229 *a* illustrates this.

As a rule these "paint-grinders" are hemispherical in shape, and

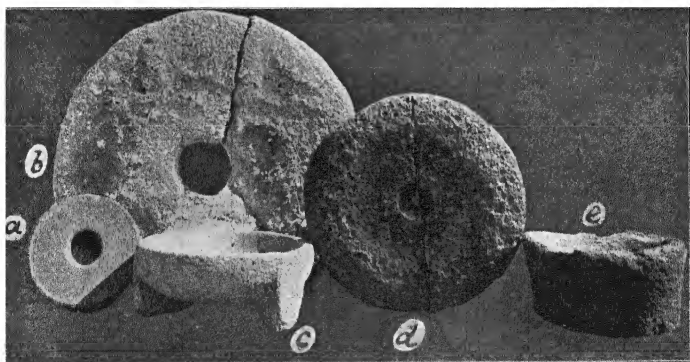


FIG. 229.—VARIOUS TYPES OF MILLSTONES AND MORTARS

measure about 4"–6" across. One specimen, however, from the Hellenistic stratum, seems to be meant for corn-grinding. It is 10" in diameter, and is made of the rough Hauran stone of which the saddle-querns are usually made. It has the conical mortice: the other stone, with the tenon, was not found. It is represented in fig. 229 *d*. A fragment of an Egyptian specimen, of porcelain with green enamel, was found in the Third Semitic stratum. The fragment was half of the side with the mortice; no other part of the apparatus was found. The diameter was 4", the depth slightly under  $\frac{3}{4}$ ".

Another step in the evolution of the hand-quern, and the last provided by the excavations, consists in the complete perforation of the upper stone.

*This, however, does not appear till the early Arab period.\** The stone, fig. 229 *b* was found in a tomb (no. 170) which must have been at that time used as a dwelling-place, to judge from the potsherds it contained.

In all periods mortars and pestles abound, consisting of large blocks of stone, more or less spherical or cylindrical, with conical or ellipsoidal hollows in them; and cylindrical or conical bars of a convenient size to grasp in the hand—though sometimes spherical pestles seem also to have been used. The normal form of pestle is shewn in fig. 230 *a*. This was the earliest means adopted for crushing grain, being apparently the only

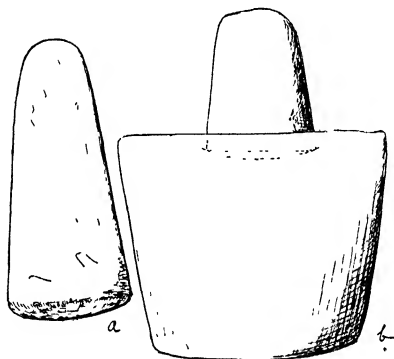


FIG 230—PESTLES AND MORTAR

method followed in the First Semitic Period. Fig. 230 *b* represents a good example from the Maccabean stratum. the whole apparatus is 5" in height. It was not often that the pestle and mortar were thus found together as in this example. "Wasp-waisted" pestles, shaped like a figure of 8, were sometimes found, but rarely. Some pestles (found only in the Hellenistic stratum) were slightly bifurcated at the upper end, like a fish-tail.

There is a type of stone dish, found with especial frequency in the Third Semitic Period: it lasts, however, in use even down to early Arab

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\* The perforation in fig. 229 *d* seems to go through the stone, but this is apparent only, not real, being due to the fracture. Care must be taken to distinguish true millstones from the perforated stones used for heavy mallet-heads, described in the following chapter.

times. It is circular, about 1' in diameter, though smaller, and (rarely) larger examples are not unknown. (One specimen, in which the three feet were united by cross-bars, together resembling a horizontal Y, to

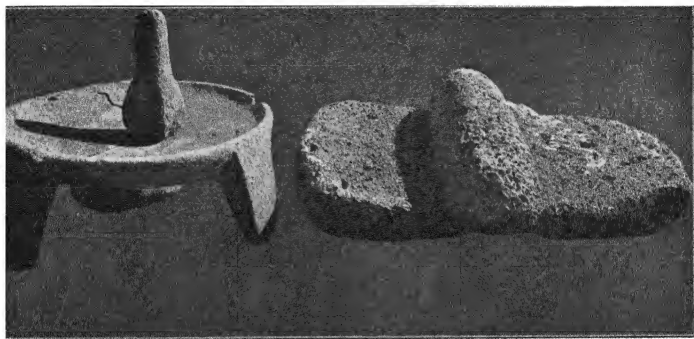


FIG. 231.—GRINDSTONES OF VARIOUS TYPES FOUND TOGETHER IN A GRANARY

the bottom of the vessel, was only  $5\frac{1}{4}$ " in diameter and  $3\frac{1}{2}$ " high.) It stands on three three-sided pyramidal feet. Fig. 229c gives an idea of its appearance. The material is usually a dark granitic stone. These objects are always very carefully finished. The association of one of them, in

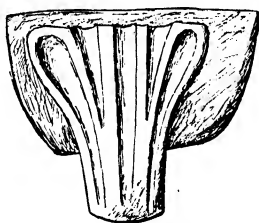


FIG. 232.—ORNAMENTED LEG OF A STONE MORTAR

a granary at the north end of IV 27, with a pestle (see fig. 231, where also a good example of a saddle-quern, from the same place, will be seen), shews that these were used for mortars. This, however, was not the only purpose for which they were used. Sometimes they have been found

blackened with smoke, as though they had been used as cooking-trays. One *earthenware* example, in rough gritty pottery, of precisely similar shape to the stone trays, was discovered in the Hellenistic stratum. This, though massive, would scarcely stand the blows of a pestle for long, and could not, therefore, have been used for the purpose of a mortar. In III 18 a fragment of a stone specimen was found covered with red paint, suggesting that it may have been used for grinding colours.

Sometimes, but rarely, they were decorated. One such example (a fragment only) was found in VI 29, with a pattern on the leg (fig. 232). The broken legs of dishes of this kind were often trimmed and used as pestles.

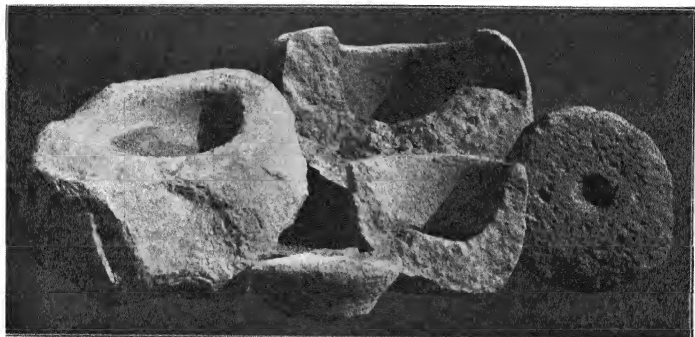


FIG. 233.—A GROUP OF MORTARS

In fig. 233 a miscellaneous group of mortars of the more ordinary kind is shewn. Two broken specimens are included, to shew the section. To the right of the picture is one of the "paint-grinder" quern-stones. In the foreground is a small stone with an almost flat top. Though the depression is so gentle it probably was used as a mortar also, though perhaps for grinding paint.

A much larger mortar, with a depression nearly 1' 6" across, was found in II 28, and is shewn in fig. 234. This must have been intended for some special purpose, as is indicated by the five small cup-hollows in the margin. It was probably not for grinding.\*

The two stones shewn in fig. 235 represent a type of object fairly common in the

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\* It may have been used for washing, like the troughs scattered round the modern wells. Could some substitute for soap have been placed in the small cup-hollows, as in a modern soap-dish?

Hellenistic stratum, but found in no earlier débris. Similar examples were found in the corresponding stratum at Tell Zakariya. No more perfect example was found at either place, and till such comes to light it is impossible to be certain as to the purpose of these objects. They are (presumably) rectangular slabs, of the porous volcanic stone of which the corn-grinders are made, about 1'-1½" thick, and bear the pattern shewn in the photograph, on one side only. This is perhaps meant to roughen the stone further and make it more suitable for grinding—if, as seems most likely, the stones are meant to be used for this purpose.

Finally, the bread was kneaded and baked; for which latter purpose an apparatus resembling the *tannûr* or oven of the modern fellahin was

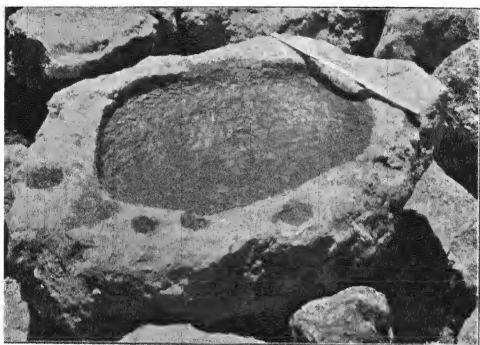


FIG. 234.—STONE MORTAR WITH SMALL CUP-HOLLOWS IN THE MARGIN

used. This is a cylinder of brick-earth about 2' in diameter,\* with walls about 1½" thick, and closed by a cover of the same material: a stone or a solid lump of clay, embedded in the middle of the cover, forms a handle by which the cover can be lifted. There is very rarely any bottom other than the bare earth. The loaves, which are flat discs, are placed inside, lying on the floor (which is covered with clean pebbles) or plastered on the wall. Outside the oven is heaped the fire, the fuel of which is generally dried manure (cf. Ezek. iv 12-15, a passage sometimes grotesquely misunderstood).

The two photographs figs. 236, 237, well shew remains of such ovens, which are common in every stratum: they are marked *t* on the plans. A contrast will be noticed

\* The modern oven seems, as a rule, to be rather wider than the ancient ones.

between the two, fig. 236 being made of plain brick, while fig. 237 is covered over with layers of potsherds. Both varieties are common: the potsherds were probably expected to retain the heat longer. On the outer surface of an oven found in VI 15 were marks which indicated that it had been tightly wrapped round with palm-branches.

Sometimes large groups of such ovens were found together, as in a house in the middle of trench 1, Third Semitic Period.

A not infrequent type of object is that of which fragments are repre-

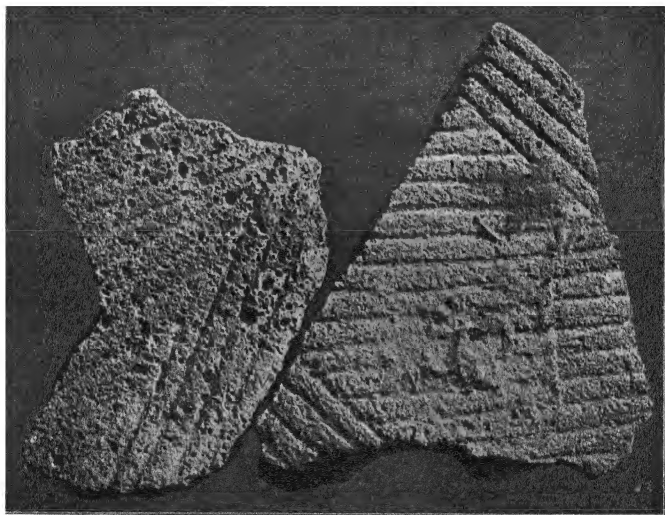


FIG. 235.—STONES WITH GROOVES, PERHAPS FOR GRINDING

sented in the photographic view, fig. 238. These are flat trays of pottery, about 10" in diameter, with the edge turned up, and with the under side of the base covered with a *semée* of small perforations, made by prods with a stick or stout straw. The top of the turned-up edge is generally ornamented with a simple moulding or other device, as shewn in the photograph. Less frequent are concentric circles on the under side, in addition to the perforations (which are always present), as in the second example in the photograph. In one or two cases the perforations were found to penetrate



FIGS. 236, 237.—BRICK OVENS

through the base, but this was very rare—apparently it was carefully avoided. Generally there was no handle, but in some, one horizontal loop-handle was attached to the side. Marks of fire upon some of the vessels suggested that they might have been used (like the iron *saj* or convex baking-tray

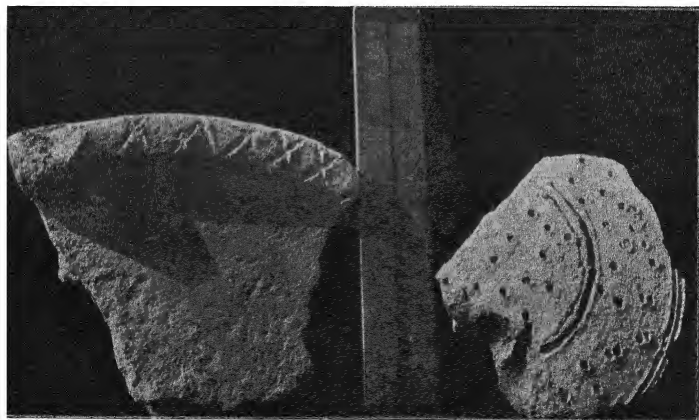


FIG. 238.—BAKING-TRAYS



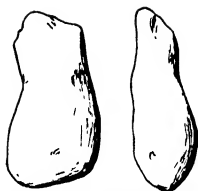


FIG. 239—LOAF OF BREAD

of the Bedawin) in baking flat loaves of bread, the perforations serving the function of admitting the heat as near as possible to the bread without burning it. One specimen was found burnt through with constant use. These vessels are commonest in the Second and Third Semitic Periods.

Probably the bread was, as a rule, made in flat circular cakes, exactly resembling in shape an unrolled pancake, as it is in the modern villages; but an interesting discovery made in late Second Semitic debris on the Western Hill shews that other shapes were made as well. This was an actual loaf of bread, preserved like the grain by having been burnt. A drawing from two aspects of this loaf is shewn in fig. 239, from which its appearance can best be understood. It is  $2\frac{3}{8}$ " in length.

A conical tube of bronze closed at the end and perforated with a number of holes (fig. 240), found in III 20, was by Professor Petrie explained to me in a letter as a bread-file for crumbling bread. It is 3" long.



FIG. 240—BRONZE FILE

#### (b) *Cooking and Serving Meat, etc.*

In describing the instruments used in the processes of cooking and serving food, an important place would have to be given to *pottery*; but as the different types of vessels will more conveniently be described fully in the following chapter, in connexion with the work of the potter, it is not proposed to say more about them here than is absolutely necessary.



FIG. 241—STONE BASE FOR A FIRE-DRILL (?)

The first essential was the obtaining of fire. It is a curious accident that nowhere in the whole Bible is there any reference to the method of kindling fire adopted in the country; but it was most likely done by means of a fire-drill, a stick rapidly rotated with the aid of a drill-bow. The sparks thus made could be caught in tinder. Probably flints were also struck for the same purpose. Numerous stones were found at all levels,\* about 2" high,

\* The example figured is from the Third Semitic stratum.

with a short perforation in both ends worn smooth (fig. 241): I am inclined to believe that these were the stones in which the fire-drill rotated, though as a rule a fire-drill apparatus is made of wood throughout.

The fuel used was no doubt, as to-day, chiefly wood and charcoal. As we have

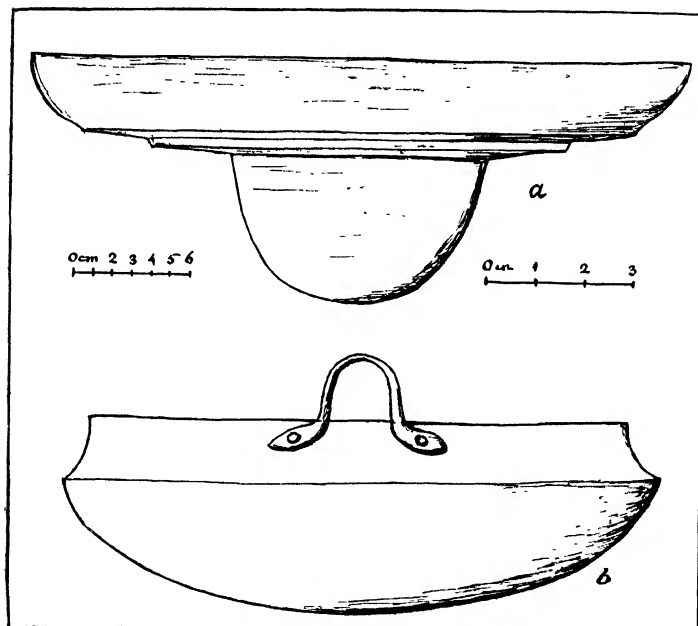


FIG. 242.—BRONZE DISHES

seen, dried manure was probably used for the fuel of the ovens. Fires were lighted in hearths such as have already been described in Chapter III.

The method of cooking mostly adopted was probably seething or boiling. The meat was placed in a large earthenware pot with wide mouth: many such were found at all periods of the city. They often shew the blackening of smoke.

Cooking-pots of bronze were also occasionally used. One such was found in a cistern inside the great cave 28 II, and has already been figured in the description of that cave in Vol I (fig. 43, p. 122). Two others are shewn in fig. 242. The first was found in Fourth Semitic debris on the Western Hill, dating about 1000 B.C. In it was a small bone, apparently of a bird. The other is older: it was found in the cistern which also yielded the horse-bit, fig. 214 *ante*. Another bowl, precisely similar, was found in the same cistern: both were broken into small fragments, and neither could be pieced together or preserved. The drawing is from a careful reconstruction.

In serving the cooked meat a whole array of plates and dishes were used, which will be described in the proper place in the following chapter. Of course it need hardly be said that such Western refinements as knives

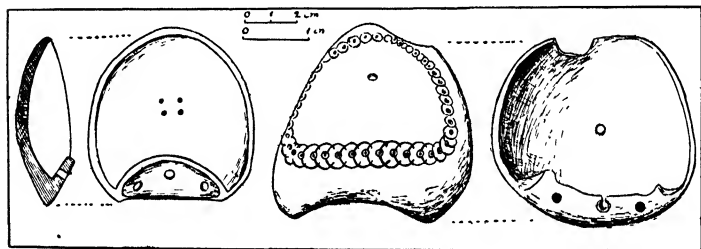


FIG 243—SHELL SPOONS

and forks were even less familiar in the ancient than they are in the modern East. Spoons were, however, used for the manipulation of liquids. The earlier examples were made of large broad shells, sometimes ornamented with impressed devices, and secured apparently to a handle by rivets. Two examples are shewn in fig. 243. On Pl. cxxxv, figs. 13, 14, 15 are three examples of bronze spoons, which from their shape are evidently meant to lift fluids from a deep cooking-bowl. The second of these is from V 27: the other two come from the Hellenistic stratum. The third is a particularly fine example, adorned, as the enlarged details in the plate shew, with an animal's head at the end. It is  $9\frac{1}{2}$ " in length.

For lifting hot meat from the cooking-pot a flesh-hook such as is shewn in fig. 244 *a*, from III 13, was used. This is a fork of bronze, socketed for fitting on to a wooden handle. It is the מולג or מולגה of Exodus xxvii 3, I Samuel ii 13: from the first of these passages we learn that the implement was of bronze, and

from the second that it had three teeth, which exactly accords with the example figured\*. A two-pronged fork (fig 244 *b*), probably for the same purpose, was found in IIIa 30. The ring on this specimen is probably for suspension.

Pl. cxxxv, fig. 12a, is a good example of a common type of knife probably used for cutting meat or some similar domestic purpose, as it is evidently not adapted for military purposes. It is of bronze, and was found in 20 II. The blade is round-tipped, and there is a slight entasis in the outlines. Both edges are sharp; the tang is flanged for receiving two hafting-plates, probably of wood; there is a cusp in the flanges, no doubt to prevent the knife from slipping out of the hafting-plates. The latter were secured by two large rivets passing through the tang of the knife.

(c) *Drawing and Carrying Water*

Water was drawn from the cisterns in comparatively small pots, the larger water-jars being too heavy when filled with water for the carrier to draw up, and the handles being apt to give way. Even among the small dipping jugs this latter was a frequent accident, as is shewn by the numbers of pots with broken handles found at the bottom of nearly every one of the cisterns. When the water was drawn to the surface it would be poured into the larger pot or skin, which when filled by the requisite number of dippings would be carried away on the water-carrier's back or head. A pottery bottle-filler, in shape resembling those still in use, was sometimes employed in transferring the liquid from one vessel to the other. That skins were used is shewn by the pottery

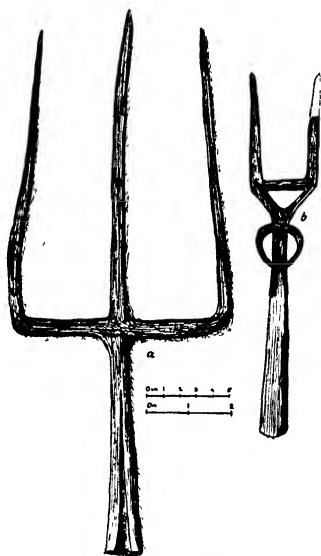


FIG 244 —BRONZE FLESH-HOOKS

\* It is not strong enough to be used for a winnowing-fork, which a casual observer might suppose it to be.

*askor* (as Pl. cxxvi 22), which evidently looked back for their model to a water-skin original. Sometimes two jars were slung pannier-wise on a donkey, much as in the present day (compare Pl. cxxv 18). In short, all the evidence shews that the methods of drawing and carrying water were identical with those still pursued.

(d) *Expressing Olive Oil and other Fruit-juice*

The former wealth of the neighbourhood of Abû Shûsheh in olive trees, where now there is scarcely one to be seen, is still a tradition among the people. A man of the village who had fought in the Russian War of 1877 told the foreman that he had there met a blind old man who asked him whence he came. He told him, whereupon the old man asked if there were still the grateful shade of olive trees round 'Ain Yerdeh. "Why," said the younger man, "there is not a single tree there!" The old man then said that he had once come down from Jerusalem with some associates (probably escaping from the police), and that they had lain concealed in the dense grove of olive trees round the well. All over Palestine the same story can be told. Trees have been destroyed to avoid payment of taxation, to supply firewood, and, in recent years, to provide material for the rubbishy trinkets beloved of souvenir-hunters. That the vine was also at one time extensively cultivated in the neighbourhood of Gezer cannot be doubted, though Islâm with its tabu on the use of wine has no doubt checked its culture. It is now being reintroduced into the country by Jewish colonists.

The many rock-cut presses that remain round Gezer, which will be seen marked on the map of the environs,\* testify to the former importance of the industry of fruit-culture. It would be impossible to spare space for a complete description of all of these presses; and indeed it would scarcely be worth while doing so, as they are mostly varieties of definite types. I shall confine myself to describing the normal types, giving an example or two of each, and then making reference to any remarkable or unusual examples that may call for special mention.

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\* Wine-presses are indicated on the map by letters to distinguish them from tombs, for which numbers are used. As the alphabet would rapidly be exhausted, and combinations of letters, dots, and other devices for differentiation are apt to overcrowd the regions of the map where there are many details close together, I have ticketed the wine-presses in each of the modern field-divisions independently.

The industry is very ancient, as is evidenced by the existence of fruit-presses which were cut in the rock before any houses were built upon it, and which in several cases are in close association with Troglodyte caves. Indeed, as has already been seen in Chapter III, there is actually such a press inside the cave 30 III. Another, marked I x C, is shewn in Pl. cxxix, fig 2, which was drawn from an unsuccessful photograph. It will be seen to be simply a cylindrical pit cut in the rock, with a small cup-hollow in the bottom for collecting the dregs of the expressed juice. The example figured is rather deeper in proportion to its width than the majority of this type. These primitive presses would probably be used for both olives and grapes, the former being crushed with stones, and the latter trodden with the feet.

Such simple forms of rock-cut fruit-press—a single rectangular or circular vat with no other appurtenance beyond a cup-hollow or two in the bottom (which indeed is sometimes omitted)—are to be met with on the hillsides as well as on the rock-surface within the town walls. Examples are *Wāret Darwīsh esh-Sharkīyeh* e, which is oval, and the “circular vat” marked on *Arq ‘Ain el-Butmeh*. On the other hand, the more elaborate olive-presses presently to be described are never found on the rock-surface after the removal of ancient debris—a clear indication that they are of later invention. Indeed, many of the more elaborate presses—and certainly all those paved with mosaic tesserae—must be attributed to Roman or even to later times. Some of them are lined with cement in which Roman potsherds are embedded.

A certain number of the single vats on the hillside are surrounded by cupmarks in the surface of the rock. In some cases these cups drain by channels into the central vat, as in Pl. cxxix, fig 1, which represents *Wāret Shakīf Hammād* f. These cups are probably for receiving jars in which the juice was collected, the channels being intended for draining back into the vat any juice that might otherwise be lost owing to the porosity of the jar. This vat is, at the top, 5' 7" × 2' 8" : it expands below. The depth is about 1' 6".

Deep single-vat presses such as this, being adapted for treading but not for the manipulation of any crushing instrument, must be wine-presses; while those provided with a pressing surface or other indication of a mechanical appliance for crushing the fruit are certainly olive-presses. This is the distinction between the two kinds of fruit-press, and it should be borne in mind by the reader throughout this section.\*

If now we exclude the ancient hilltop presses from consideration, and

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\* “Fats overflowing with wine and oil” are referred to in Joel II 24.

confine ourselves to those exposed on the sides of the *tell* and of the hills around, we shall find that the normal olive-press consists of two parts: a shallow pressing surface and a deeper receiving vat. There are two varieties of this type, depending on the relative position of the two members. In the one the receiving vat is sunk in the middle of the pressing surface; in the other it is outside the pressing surface, and communicates with it by a channel. These two contrasting types are illustrated by the photographs figs. 1 and 2 on Plate cxxx.

The pressing surface is almost invariably square or rectangular. It is always shallow, being never sunk more than 1'-1' 4" beneath the lowest point of the original surface of the rock. The receiving vat is also usually square, though in a few cases it is circular. It is smaller in horizontal dimensions, though considerably deeper, than the pressing surface. When the vat is in the middle of the pressing surface there are occasionally grooves to direct the juice into it. When it is outside the pressing surface the communication is either a channel cut through the ridge of rock separating them, or more rarely a drain cut obliquely through the body of the rock.

The size of the presses varies greatly: *Wa'ret 'Othman d*, a press with the two members separate, has a pressing vat of irregular shape measuring 16' 4" by 11' 2", and the whole measures 21' by 11' 2". On the other hand, *Ard 'Ain el-Butmeh e*, a press of the same type, measures not more than 6' 2" by 4' 8" altogether.

There are some examples of this kind also in which the rocks around bear cupmarks, doubtless, as in the simpler presses, to serve as stands for jars. One of the cups round *Ard 'Ain el-Butmeh a* is square, which is very unusual. I think I am right in saying that there is *invariably* a cup-shaped depression in the floor of the receiving vat; and frequently there are several similar cups in the floor of the pressing surface, probably to collect the dregs that might not run off to their proper receptacle.\*

One of the wine-presses of this kind is cut on the top of the conspicuous square boulder called *Hajar Ibrahim*, which has already been described in Vol I, p. 5. Like the so-called rock-altar at Zor'ah, which also is merely a wine-press damaged

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\* I was sometimes interested to notice illustrations of the secondary use of these fruit-presses, as threshing-floors for stolen grain, of which the classical Biblical example is that of Gideon (Judges vi 11). Just as Gideon beat out his wheat in some inconspicuous hillside wine-press for fear of the Midianites, so I often found on examining the fruit-presses round Gezer evident traces of their having been used for threshing wheat, secretly removed from the public threshing-floor of the village to diminish the taxable quantity displayed there for the inspection of the revenue officials.

by subsequent quarrying, this stone has no religious purpose whatever, but it is no less worthy of mention.

In *Sha'b Ya'kûb c* the channel joining the two vats is prolonged as a spout, extending over the receiving vat. There is no other example of this in the neighbourhood

The procedure followed in using these olive-presses was no doubt to crush the fruit on the pressing vat with stones, rollers, or pestles, and then to allow the juice to flow into the receiving vat and to stand there till such impurities as fragments of the stone, dirt from the surface of the pressing vat, etc., had sunk to the bottom. There is very little indication of the mechanism used in crushing the fruit in the rock-cut presses. Probably in the majority movable stones, manipulated with the hand, were all that were used; but more elaborate apparatus was sometimes employed. A large broad stone wheel, rotated round and round a central staple by an animal, must have been used in some of the larger presses. The socket for the staple remains in the *Sha'b Ya'kûb* press just mentioned, and the stone wheel is still lying beside *Sha'b Ya'kûb m*, which will presently be more fully described. It is 4' 8" in diameter. There are at the moment of writing two or three such wheels to be seen lying about the ruins of Khurbet Yerdeh: how long they will remain there depends, of course, on the fellahin, who are industriously carting stones away from this ruin for building purposes.

After the crushing by pounders and rollers, the juice was expressed from the fruit by the steady application of a heavy weight. For this purpose beams or boards were placed over the fruit, and great stone weights laid on top of or suspended from them. Two such weights still remain, in a fruit-press of the normal type near the road between Abû Shûsheh and Saidûn. Sometimes the vertical wall of rock behind the press displays a socket, into which was fitted the base of a heavy wooden lever: the weights were suspended from its head, which projected over the receiving vat. The weights hung into this vat, which afforded a convenient pit for them.

In some modern fruit-presses the pressure is applied by means of a wooden screw. Probably this device was not used in the ancient presses: none were found with sockets for two staples, one on each side of the pressing surface, such as would be required by the supports of the screw. A socket for *one* staple, to support a rotary wheel, was found in the middle of the pressing vat of one or two examples.

The rock is usually left bare in the pressing surface, but the receiving



vat is frequently lined with cement, and sometimes paved with white mosaic tesserae. No examples of coloured mosaic were found, but a certain amount of decorative effect was sometimes obtained by a combination of square and lozenge-shaped tesserae.

In *Arḍ 'Ain el-Buṭmeh a* there are overflow channels to carry off washings from the pressing vat. It is surprising that this simple and apparently desirable detail is not more frequently to be found.

We may now proceed to describe some of the principal rock-cut

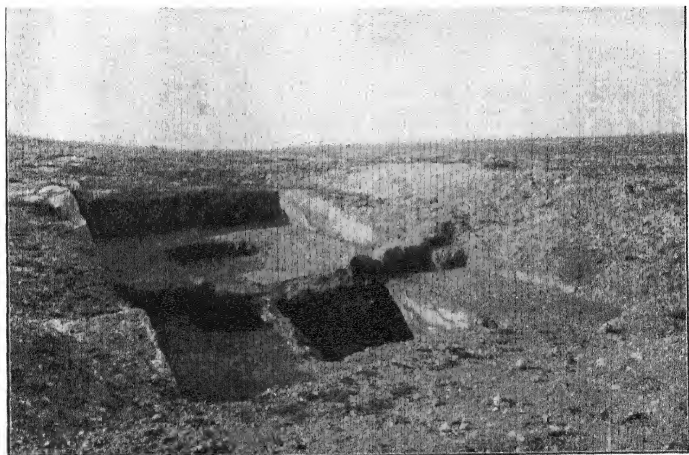


FIG. 245.—WINEPRESS *Wa'RET SALĀMEH a*

presses surrounding the site of the city. We shall take them in order of position, beginning at the north-west corner of the map and working round the hill.

*Wa'ret Salāmeḥ a*.—This is a fine press with mosaic floor. It is divided into two compartments, separated by a low rock-wall which is broken away in the middle. The upper compartment is 16' 6" long and 15' 10" broad: the lower is 12' 4" long and 17' 4" broad. These are the average dimensions: the angles are not truly square.

The floor of both compartments is paved with a mosaic of white tesserae; but

while in the lower compartment they are entirely *square* set, in the upper square and diagonal tesserae alternate—a margin of square-set tesserae enclosing a space in which they are set diagonally, the space being subdivided (as shewn in the plan, Plate cxxix 4) by crossing lines of square-set pieces. It is possible that there was a more elaborate pattern in the centre, but there is here a great fracture and the whole middle portion is gone. There are two rectangular vats in the lower compartment communicating with one another. These vats are lined with cement and paved with mosaic: in the bottom of each is a cup-hollow, also lined with mosaic. They measure respectively  $3' 1\frac{1}{2}"$  by  $2' 9"$ , and  $7' 5\frac{1}{2}"$  by  $5' 9\frac{1}{2}"$ : the larger vat is the deeper. There

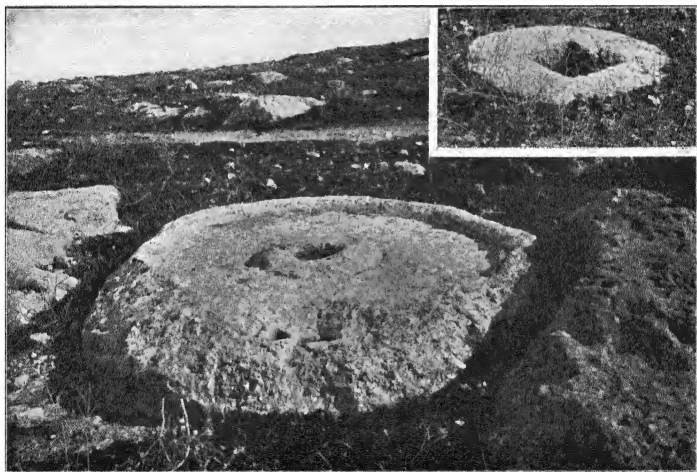


FIG. 246.—OLIVE-PRESS SHI'AB YA'KUB m  
(THE CRUSHING WHEEL IS SHOWN IN THE SMALL INSET VIEW)

is a step left uncut in a corner of each area to facilitate descent to the press. In each corner of the lower surface is a small cup-hollow. A photographic view is shewn in fig. 245. The centre of the upper compartment was perhaps broken by someone who desired to obtain possession of a lead pipe about  $3\frac{1}{4}"$  in diameter, part of which was found running under the mosaic.

It will be noticed that this press is exceptional in more than one respect. It is a combination of the two types, in that it has the receiving vats outside the pressing vat, but sunk in what can only be described as a secondary pressing vat. Further, it contains two receiving vats. This is not an uncommon characteristic, and the additional receiving vat may be explained in a variety of ways. They may in some

cases be additions made because the first vat was too small, or they may be for different qualities of fruit-juice; or not unlikely they may belong to different individuals who held the press with its associated vine or olive yards in partnership. I have sometimes thought that one of the vats was meant for allowing the juice to stand till the dregs had settled, after which it was passed into the receiving vat: this is possible in some cases, but the explanation will not fit every one.

*Sha'b Ya'k'ab m.*—A round crushing surface with a staple in the middle for pivoting the wheel. The receiving vat is 6' 6" square and 2' 7½" deep: it is paved



FIG. 247. PART OF WINEPRESS ARD 'AIN EL-BUTMEH f

with a mosaic of unusually large tesserae. The stone and crushing wheel are shewn in fig. 246.

*Sha'b Ya'k'ab n.*—An olive-press of the ordinary two-vat type. The rocks around are smooth and covered with cupmarks.

*Ard 'Ain el-ButmeH f.*—This is the most elaborate and extensive olive-press in the neighbourhood. Its plan will be seen on Plate cxxxi, where the dimensions are figured and other details noted. A flight of steps, cut in the rock, with a cupmark beside them, which are at the eastern end of the cutting (at the top of the plan), are shewn in the accompanying photograph (fig. 247). There probably was a building erected over at least part of this press.

*Arq 'Ain el-Butmeh g.*—A single rectangular vat, measuring 3' 5" by 2' 2" by 1' 11½" deep.

*Arq 'Ain el-Butmeh k.*—Two small vats, little bigger than large cupmarks.

*Arq 'Ain el-Butmeh l.*—A cupmark in the centre of a large shallow pressing surface. This seems to be an old type: a similar example was found in the rock



FIG. 248.—OLIVE-PRESS IN TRENCH 14

under the débris at the north end of trench 14 (see fig. 248). *Wāret Ilajar Ibrahīm a* is similar.

*Rasm Yerdeh a.*—Consists of two large vats, one of them circular, with a diameter of 13' 9". There are several cupmarks around.

*Arq Yerdeh a.*—To my regret, I had time only for the partial excavation of this very large olive-press. It seems to consist of two members: see the plan, Pl. cxxix 3. The first is the pressing vat, paved with mosaic—square-set round the margin, and diagonal over the area of the surface. As the photograph (fig. 249) shews, this mosaic

is now much broken up. In the middle a boss of rock has been allowed to remain, rising slightly above the level of the pavement. In this is cut a socket for the staple of the pressing machinery. The second member is a great square reservoir, by far the largest receiving vat anywhere in the neighbourhood. To clear it out would have taken up too much time: a shaft was sunk in one corner to a depth of 10' 10", and even there the bottom was not found. Pilasters adorn the face of the rock on the side towards the pressing vat, but these are partially concealed by a masonry lining that has been built inside the pit. There seems (to judge from the way the rock is



249.—OLIVE-PRESS ARQ YERDEH a

cut) to have been a wall built round the pressing vat, and possibly the whole press was enclosed in a building.\*

*Nijmet el 'Adas a*.—I include this peculiar rock-cutting here, because I do not know where else to describe it. It is shewn in the photograph fig. 250, and in plan in Pl. cxxix 5. A square sinking in the rock, 2' 3½" × 5' 11", descends by steps to the doorway of a cave, now fallen in. A circular groove is cut in the rock-surface at one corner; and on a projecting boss of rock close by is the only "cup and ring" mark I have seen in Palestine. The latter is 2' 5" in diameter.

\* Some temporary or permanent covering must have been erected over all these presses to protect the contents of the vats from the heat of the sun.

*Nijmet el 'Adas e.*—This is a group of five cups, the disposition and relative size of which will be seen from the plan in Pl. cxxix 7. On the edge of the rock is cut a curious mark in the rock, possibly for a staple, though I have not seen elsewhere anything similar. An enlarged section is added to the plan.

*El-Kuṣ'ah e.*—This remarkable press, which has been much shattered (probably by an earthquake), is well shewn in the accompanying photograph (fig. 251). In the middle of the picture is the large pressing surface. The circular sweep of the

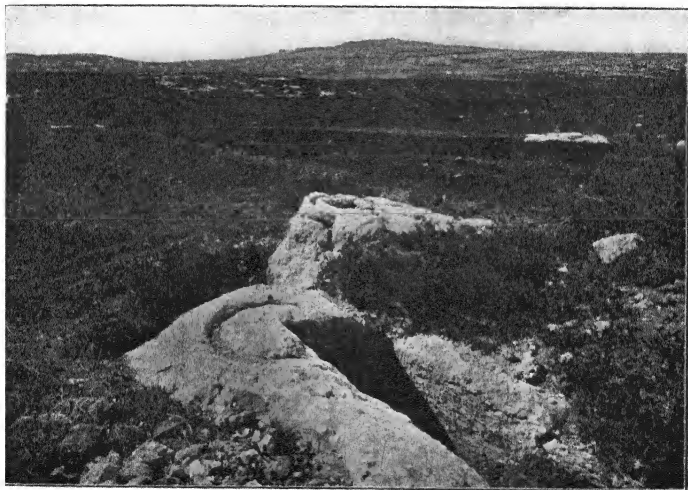


FIG. 250.—OLIVE-PRESS (?) NIJMET EL 'ADAS a

crushing wheel has made a mark on the rock distinctly visible in the photograph. In the vertical wall of rock behind is the socket for the end of the pressing lever. The juice is directed by grooves into the receiving vat which is to the right of the photograph. It is a large circular receptacle, of which one side is now broken away. In the background is the road from el-Kubâb to Abû Shûsheh, behind which rises the *tell* of Gezer.

*Wâ'et Darwîsh esh-Sharkîyeh a.*—This is a rock-surface covered with cupmarks. It has two wine-press vats and one natural hollow connected by channels, as the sketch-plan Pl. cxxix 8 shews. There is also a small cistern sunk through the rock and two V-marks on the edge, one of them a channel, the other a triangular sunk space.

*Wa'ret Darwtsh esh-Sharktyeh c.*—An olive-press with a circular receiving vat sunk in the middle of a square pressing vat. Conversely *Sha'b Yaḥṣib b* is a circular pressing vat (paved with mosaic) with a square receiving vat in the middle. In close association with the latter are tombs nos. 33 and 34.

*Wa'ret Shaktf Hammād f.*—A row of four independent vats, probably a set of wine-presses.

*Havaktr a.*—Of this remarkable fruit-press, plans and section are shewn in Pl. cxxix 9. In this the pressing surface is an irregular four-sided space, 9' 5" ×

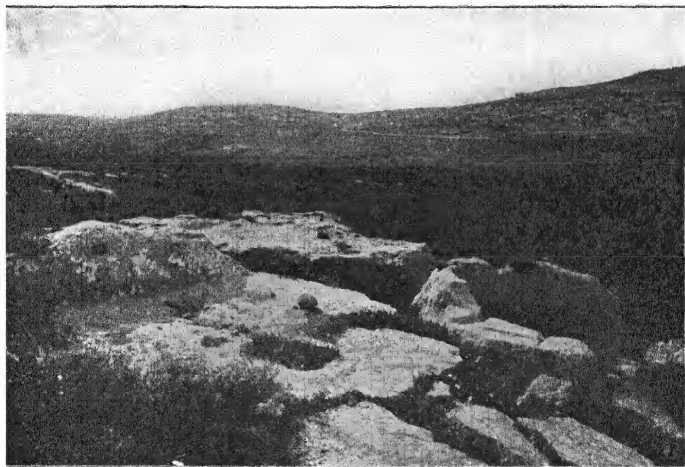


FIG. 251. OLIVE-PRESS EL KUS'AH c

11' 8", and from 1' 1" to 2' 3" deep. On the walls of this depression, at A, a circle 8" in diameter is carved: at B a similar circle, 10" diameter, with the vertical, horizontal, and oblique (45°) diagonals marked. One of the latter is very faint. The expressed juice runs through two channels into an extension of the pressing vat, from which it is precipitated into a bell-shaped cistern, 11' 8" deep and 10' 5" diameter. It is approached by a flight of seven rock-cut steps, which enter it through a doorway with arched head. In the middle of the floor is a cupmark. In the sides are three recesses; resembling the arcossolia of tombs, probably meant for storing jars in—at least, two jars of Roman ware were found in one of them. The recess at the side opposite the staircase seems to be a hole broken through a flaw in the rock, and not

to be intentional: those on each side of the staircase are, however, evidently made on purpose.

It may be worth mentioning in passing that, in the rock-surface above the entrance to tomb no. 176, there is a pair of cupmarks with a channel between them like a miniature olive-press. These cups measure respectively  $5\frac{1}{2}'' \times 5\frac{1}{2}''$  and  $11'' \times 7''$ : they are  $1\frac{3}{4}''$  apart. This may be of interest in connexion with the olivepress-like tables of offerings to be described in a later chapter.

*Wa'ret el-Jāhah d*, of which a plan will be found in Pl. cxxix 6 and a photograph in fig. 252, is a striking instance of the multiplication of receiving vats. The pressing vat is irregular and roughly cut. In its middle is a square hole measuring



FIG. 252.—OLIVE-PRESS *WA'RET EL-JĀHAH d*

$1' \times 1'$ , by  $5\frac{1}{2}''$  deep, perhaps for a staple. It communicates with vat *b* by a channel: the other vats seem to be independent of it. There is a flaw in the heart of the rock under vats *b, c*,  $1' 2''$  below the bottoms of the vats, and the floor of each vat has broken into this hollow, as shewn by the dotted lines in the plan. The dimensions are there figured. There is a small cup in the floor of each of the three vats *d, e, f*.

*Arđ et-Tayāshah a*.—This small press is noteworthy for the shallowness of the pressing surface and the two small receiving vats side by side, as shewn in the photograph fig. 253.

*K'hallet Kul'at er-Rinjis a*.—This being a single vat is probably a wine-press. It is remarkable for the raised collar that surrounds the vat, as the photograph fig. 254 shews. There is no similar press anywhere in the neighbourhood.



Beside the rock-cut presses, we find many inside the city of a different kind, made of movable slabs or boulders of stone worked into the required shape. These are distinguished in the plans by the letter *m*,\* the initial of the Arabic *ma'sara* (an oil-press).

Of these the ordinary form consists simply of a circular table of stone, between 4' 9" and 6' 6" in diameter, with a raised rim, within which the fruit is crushed. The juice is collected in a cup hollowed at a spot just inside the rim.† It is sometimes directed by channels radiating from the cup. The photographic view fig. 255 gives a good idea of such a press,

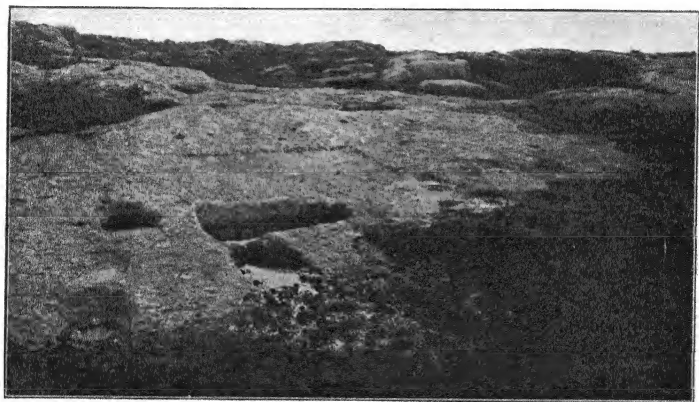


FIG. 253.—OLIVE-PRESS ARQ ET-TAYÁSHAH 2

which is often found, in all the Semitic Periods. They seem to have gone out of use entirely by the Hellenistic Period.

A quite different variety of fruit-press is shewn in fig. 256. This is a block of stone, measuring about 2' across the upper surface, and perhaps 1' deep. The top is smoothed, and surrounding it is cut an oval ring. Communicating with this ring is a groove that runs over the edge of the upper surface and down the vertical face of the stone. The use of the

\* In Plan I the fruit-presses so distinguished are all rock-cut.

† In one specimen from III 12 the cup was outside the rim in a projection from the circumference of the circle: a channel was cut through the rim to open into it.

instrument is obvious. The stone is placed on a raised surface, so that a vessel can stand under the vertical channel. The fruit is piled in the middle of the space within the ring and is there crushed: the expressed fruit flows into the ring and runs thence through the vertical channel into the vessel. This form of olive-press was not much in use, and it is suggestive that the only examples found had been utilized as building stone, as though indicating



FIG. 254.—KHALLAT KUL'AT ER-RINJIS a

that they were not considered very efficient. The specimen illustrated was found in a wall at the north end of trench 2, under the surface.

In the Fourth Semitic Period, large stone vats, sunk to their brims in the plastered pavement of a room, were introduced; and this was the normal type during the Hellenistic Period. Numerous imperfect specimens of this kind of press were discovered; but by good fortune an installation, complete save for the wooden lever, was found just at the end of the excavation. This was in V 4. It is so typical that its description will serve as an account of all the others similar to it.

In the north-east corner of a chamber measuring 23' 3" N.-S. by 19' 3" E.-W., a space 6' 7"  $\times$  9' 8" is marked out by a row of slabs set on edge (AA in fig. 257) projecting 9" above the plastered floor. This is not carried on to meet the western

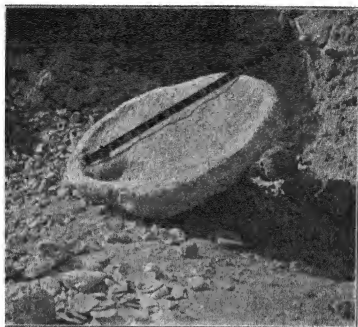


FIG. 255.—STONE OLIVE-PRESS

wall of the chamber, as it would interfere with entrance B. The east end of this enclosure is not quite straight, but has a distinct convexity toward the north. Within the enclosure are three vats, C, C', and D, sunk in the floor so as to project about as much as the row of slabs that surrounds them: the top surface is, however, not absolutely horizontal in any one of them. Beside C is a smaller vat, E.

The vats C, C' are cubical blocks of stone, measuring 2' 4" square on their upper

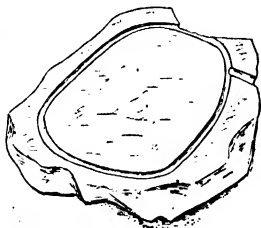


FIG. 256.—STONE OLIVE-PRESS

surface and about 20" deep. The upper surface is recessed under a square margin: in the centre is a round hole, the opening into the hollow of the vat, which expands downwards, ending at the bottom in a cup-shaped depression: reference to the section

(fig. 257) will make this description clearer than is possible with words. The upper surface has grooves (five in vat C, four in C') to direct the expressed juice into the central cavity. The central vat, D, is not made of one piece of stone, but of two or three cemented together: it is possible, however, that it was originally one piece and was broken by an accident. The internal dimensions are: length from 4' 5½" to 4' 7"

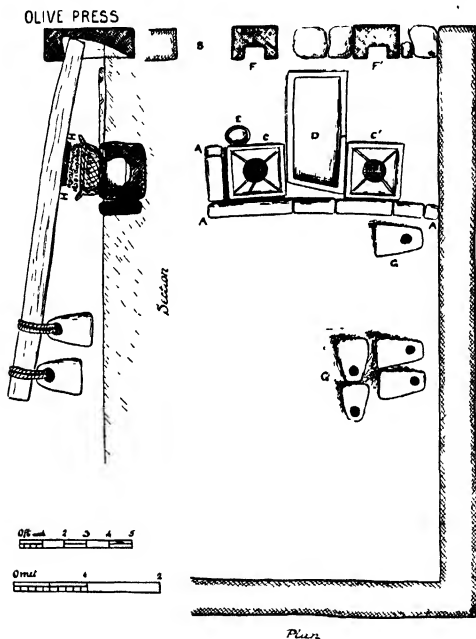


FIG 257—LARGE OLIVE-PRESS

(owing to the crookedness of the southern end), breadth 2', depth 1' 3". The margin is 3" to 4" broad. The small vat E measures 11½" × 10" × 5", over-all dimensions.

Built into the north wall of the chamber, and opposite the two vats C, C' respectively, are two standards, F, F'. These are blocks of stone, 4' high, about 2' across the face, and 1' 5" thick, but tapering slightly downwards. In the face of each stone is cut a deep chase-mortice, beginning at the base of the stone (under the level of the pavement) and ending 11" from the top with a slightly arched top. The depth of the chase-mortice is *nil* at the bottom of the stone, 1' 1" at the top, and its breadth

is 1' at the top, though it contracts by a very slight shoulder about 9" from the upper end.

Lying on the floor of the chamber, outside the enclosure containing the vats, are five stone weights GG. These are heavy pyramidal blocks of limestone on a base 1' 5" square, tapering to 1' 1" (the dimensions vary slightly in the different specimens), and 2' 2" high. Near the upper end of each is a round perforation.

Except that one of these weights is broken, and there is a chip out of the edge of the small vat E, this olive-press is perfect, wanting only the wooden beam to make it once more serviceable.

This beam is supplied in the section drawn at the side of the plan, which shews the method of working. The slight shouldering in the chase-mortices of the standards



FIG. 258.—PHOTOGRAPH OF OLIVE-PRESS

just referred to may be taken as indicating that the beam was about 9" deep. A basket of olives, already crushed by rollers or pounding stones, would be placed on top of each of the vats C, C': a small piece of board, HH, would probably be laid upon them, and the heavy wooden beam laid upon that, one end slipped into the chase-mortice and the other end weighted with the stone weights. When the juice was expressed into the vats C, C' it would be baled out into D, and there allowed to stand till olive-stones, fragments of the fruit, skins, and other impurities had sunk to the bottom.<sup>1</sup> The small stone cup E was probably meant as a stand for a jar.

Close examination of the photograph (fig. 258) will shew that the top of the chase-mortice in the stone farthest from the spectator has been chipped, no doubt on some occasion of manipulation of the heavy wooden beam. The nether stone of a saddle-quern lies in the wall beside this standard: this was found in the neigh-

\* It is also possible, though less probable, that D was meant as a receptacle for the olives awaiting their turn of crushing.

bourhood, and placed where it lies during the excavation. It may be as well to call attention in passing to the likeness of a human face above the chase-mortice on the standard nearest the spectator. It is a curious instance of the perversity of which photographs are capable. This "face" is a purely accidental combination of marks and flaws on the stone, of very various depths, and indeed can scarcely be identified at all on the original stone.

In a chamber to the east of that containing the press was lying a flat disc, resembling that shewn above in fig. 255, 5' 2" in diameter. This probably was meant for crushing the olives upon, before pressing them, and most likely belongs to the same installation.

Vats similar to C, C' in fig. 257 were found here and there, but round instead of square. The number of grooves in the upper surface ranges from four to eight. The hollow always expands downwards, and often has in the bottom a small cup. The same drawing also shews the invariable form of the weights used, which are always massive stone blocks, pyramidal in shape, with a hole for suspension through the top.

Stone vats were used for other purposes also, sometimes less intelligible than those connected with olive-presses. Thus V 21 B is a long flat slab of stone, measuring 6' by 3', with a raised collar all round—just like the collar surrounding the upper surface of the vat figured above—and at one end a small cup-like hollow. The axis of the slab lay north and south, the cup being at the southern end. This also was probably meant for the expression of fruit-juice.

At V 21 C was found a small vat, hollowed out of a spherical stone about 2' diameter. It was full of black ashes when found.

Stone vats such as the last, which were very common throughout, were generally circular; but a few square ones were found. One such appears in V 21, about the middle of the trench (the easternmost of the two there marked with the usual symbol *v*).

By the reference letters V 4 *kv* is denoted an oblong vat *made of sun-dried bricks*, rather later in date than the walls with which it is connected in the plan. There was nothing found to shew to what purpose it may have been erected: the material is rather too porous to hold liquid. It measures 3' 2½" long by 5' 6½" broad.

Besides the large apparatus for expressing considerable quantities of oil, there were also found smaller instruments, perhaps for obtaining a limited quantity for immediate use. Such is probably the small mortar, 8¼" high, 9½" broad, and 1' 2" long, which was found in the Hellenistic stratum. A channel running out from the bowl shews that it was in some way connected with the preparation of liquid (fig. 259) \*

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\* It might also be the heel-stone of a door, the channel being of the nature of a chase-mortice.

Another very complete olive-press was found in Third Semitic débris on the Western Hill, and is here represented in plan and section (fig. 260). A circular disc of stone, AA, was surrounded by a dwarf wall, the outer diameter of which was 7' 4", the height 2' 3". A channel, left open under one side of this wall, communicated directly with a large bowl, B. This was a specimen, of unusual size\*—in fact, the



FIG 259—SMALL STONE MORTAR

largest found in the *tell*—of the common open bowl of Aegean origin, frequently found decorated with painted friezes of birds, etc. This example, however, had only two or three red lines encircling the side. Some olive-stones were still preserved among the earth with which it was filled. Behind was a smaller enclosure, C, of irregular shape, and at a lower level, its floor was paved with small stones and behind this again was another enclosure, D, yet smaller, and at a higher level.

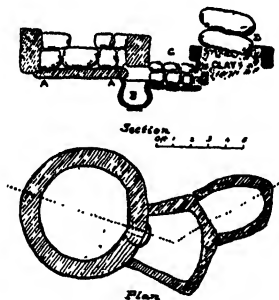


FIG 260—OLIVE-PRESS

This was full of clay, on which rested three large stones (only two of which appear in the drawing, the third being behind) 2' 4" in length, and of a rounded section. The layer of clay on which these stones rest must indicate the original surface of the ground in which the press was sunk. It is evident that the olives were piled on the flat stone A, and crushed with the rolling stones that, when not in use, were

\* 1' 3 $\frac{3}{4}$ " high and 11 $\frac{3}{4}$ " across · it is shewn in fig. 341 (post, p. 181).

piled up in D. The expressed juice ran into the bowl B, and was collected by an operator standing in the space C

Before leaving the subject of olive-presses reference should be made to a rock-cutting at the south end of trench 16. The plan will be understood from the annexed cut (fig. 261). It consists of a vat (A), diameter 6' 6", maximum depth 11", in which is cut a smaller cup. North of this is a similar vat, diameter 6' 3", maximum depth 1'. The sides of this vat are oblique, not vertical: there is no cup in its floor. Between the two is a natural sinking in the rock, the side of which terminates, at D, in a small natural hollow undercutting the edge, here 3' 11" high. Above it are two right-angled steps E, rising in height from zero at the ends to 8½" at the angles. These resemble the cuttings made in the surface of rocks in the mountains

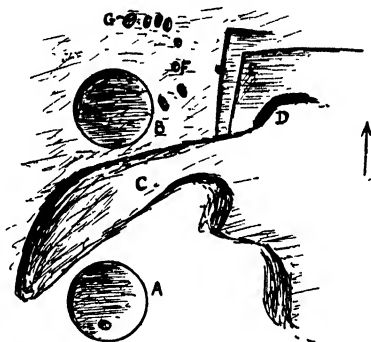


FIG. 261.—ROCK-CUTTING IN TRENCH 16

by quarrying stones, and it is probable that these steps are nothing more important. Between these steps and the vat B are a number of cupmarks, one of them on the line of the upper step, the others disposed as shewn in the plan. They are all shallow, oblong depressions, except that marked F, which is 1' deep, and the cup G, which is 1' 3" deep.

The subject of honey and bee-culture can most conveniently be alluded to under this section. Fig. 262 represents a type of object of which a considerable number were found here and there, especially in the Third Semitic Period: a jar, inverted, and pierced with a number of circular holes. It struck me that these might have been rude beehives: if not, I have no explanation to offer for them.



*(e) Filtering and Refining Liquids*

From the earliest times liquids were filtered by being passed through a strainer of one or more narrow holes. Probably the purpose was principally to remove grape-skins and stones from wine, and perhaps similar impurities from other fruit-juices. There is, however, considerable variety in the method of application of the strainer. It may be either fixed to the vessel in which the liquid strained is used, or it may be an independent vessel through which the liquid is poured to its final receptacle; and, in the former case, the strainer may be so placed that the liquid is filtered when it is poured in, or else when it is poured out. Some specimens of the ordinary types of filter will be found described in the section on Pottery.

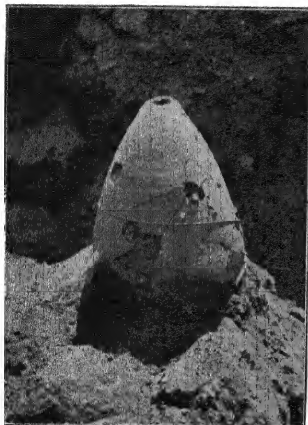


FIG. 262.—JAR WITH STRAINER

In fig. 263 a vessel from **V 29** is shewn in section. This is especially curious for having a filter whereby the liquid was strained in passing both in and out of the vessel. The mouth was closed by a fixed screen with some perforations in it, and a similar screen was behind the spout. The vessel was in reddish-coloured ware. The height of the fragment remaining is  $6\frac{1}{2}$ ".

A restoration\* is attempted in fig. 264 of an interesting vessel, of which some six or eight fragments were found in **VI 2**. It must have been of considerable size, with a mouth about 1', more or less, in diameter. There were two bold handles, right-angled, ornamented on the back with deep grooves. The lip round the mouth was heavily moulded; the fractures shewed that the moulding concealed a channel or tube running inside, right round the mouth. This tube had two orifices: one, in the

\* Evidence for all the details shewn in the drawing remains on the fragments, except for the raised collar round the strainer, which, however, was an obvious necessity. No fragment of the lower part of the vessel was recognized.

shape of a cup with strainer bottom, at the attachment of one handle; the other, in the shape of a spout moulded into the form of a lion's head, at the attachment of the other. The wine, or whatever liquid was stored in the jar, was evidently not poured in at the wide mouth, but at the strainer, and ran round the tube and out at the lion's head.

The modern natives of Mt Lebanon have a method for separating out oil and water, when they have become mixed, which is possibly a survival of an ancient custom. The mixed liquid is placed in a vessel with a hole in its base, which has previously been stopped from the outside. This is allowed to stand till the water by its weight has separated from the oil. The stopper is then cautiously withdrawn and the liquid allowed to trickle out. The water runs off first; as soon as it is seen that the *oil* begins to run, the stopper is replaced, and the oil poured into another vessel. Some vessels of various sizes and shapes with a hole drilled in the base may have been meant for some such purpose. They are found in all the Semitic strata. The hole is evidently made with intention. It is possible some of these may be simply bottle-fillers.\* In some the hole seems to have been an afterthought, drilled in the vessel; in others it has evidently been made on purpose from the first, the pottery being slightly thickened round the aperture.

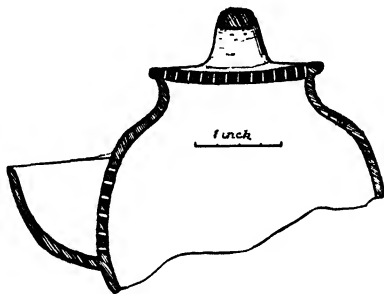


FIG. 263.—FILTERING VESSEL

## § 28.—DRESS AND ORNAMENT

### (a) *Clothing and its Manufacture*

Clothing may consist either of textiles or of skins. The preparation of the former is illustrated by the spindle-whorls, with the aid of which the thread was spun, and by the loom-weights of the weaver; all the rest of the apparatus, being of wood, has disappeared. One or two tiny fragments of cloth that have chanced to remain give some idea of the finished product. The preparation of skins can only be illustrated by the knives and needles used in trimming and stitching them.

\* They may also have been used in preparing cheese, etc.

1. *Spindle-whorls*.—A rough untrimmed and unperforated pebble, tied on to the end of the spindle, is generally found sufficient by the

modern rustic spinners, and such probably was often used by their ancient predecessors.

An apparatus less primitive, but still a makeshift, was made by the Gezerites from the disc-bases of jars, broken away from the vessel, and perforated in the middle. In one case, found in the First Semitic stratum, a circular groove was cut round the perforation, midway between it and the edge of the disc. This was the

only attempt at ornamentation noticed in any of these makeshift whorls. This disc-base whorl was common in every period:

one such from Cave 15IV is illustrated (Pl. xxvi, fig. 2) Sherds from the sides of vessels, broken and trimmed to a roughly circular form, and then perforated, are also very common: the fractured edge is sometimes left rough, sometimes rubbed smooth. The hole was

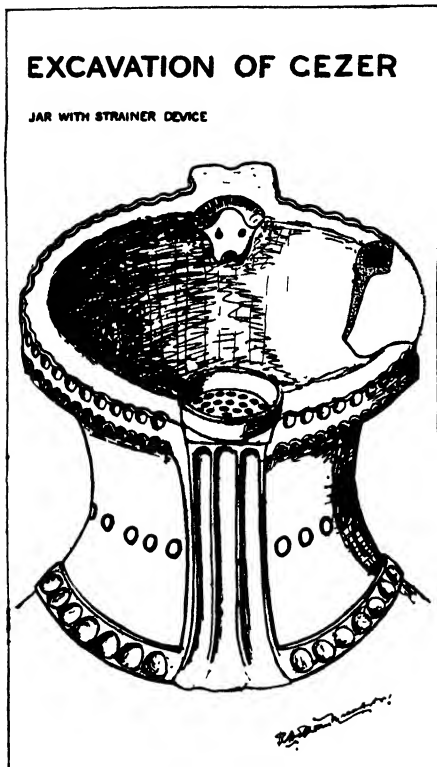


FIG. 264.—VESSEL WITH FILTER, TUBULAR RIM, AND SPOUT

drilled through half-way, then the sherd was turned round and the hole drilled from the other side, so that it is counter-sunk on both

sides \* Not infrequently, roughly trimmed circular potsherds were found; prepared, apparently, for perforation, which has never been carried out. A yet earlier stage was illustrated by a potsherd that had a circle scratched on each side, evidently with a compass, which was probably a guide for trimming the intended spindle-whorl to shape.

Besides perforated potsherds, pebbles picked up and drilled, but not otherwise treated, are not uncommon. Pl. cxxxii,† fig. 4 [30 IV] is an example in limestone. A triangular pebble of jasper was found in II 12, in which a hole had been begun from both ends, but not finished. Flat sea-worn pebbles are preferred for this purpose: such is fig. 5 [13 V]. Commoner still are rather broad flat discs of soft white limestone, about  $\frac{3}{8}$ " in maximum thickness, trimmed to a roughly circular form. An example is fig. 6, from the Third Semitic stratum.

The above are all what I have termed "makeshift spindle-whorls." There are besides objects of stone and pottery, made from the first specially for the purpose. Both materials are common at all periods, and in type there is little or no change from first to last. The stone whorls are circular discs of diorite, about  $1\frac{1}{2}$ " in diameter and  $\frac{3}{8}$ " thick, with a round hole in the middle; fig. 7 represents one of these. The example from which this diagram was made was found in Second Semitic debris, but the drawing will serve as a representation of specimens from all periods. The only stratum in which such stone rings are not extremely common is the Hellenistic. They are sometimes found in groups, five or six together: in one case in II 29 a group of four was found, with a splinter of bone and a bone pricker of simple type, in a jar lying on the rock. The perforation is not counter-sunk, but cylindrical; it was drilled from both sides, as is shown by unfinished specimens (such as fig. 8 [First Semitic]), in which the perforation has not been carried completely through.

Besides diorite, limestone and soft chalky clunch are found as materials for this type of spindle-whorls. They are in appearance precisely similar to the diorite ones. A few were also found in red or white pottery. Ornament of any kind is extremely rare: fig. 9 [II 9] has a groove round

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\* Sometimes the manufacturer missed the connexion (after the fashion of the engineers of the Siloam tunnel), and often examples were found in which he had wearied of his work and thrown it aside before the perforation was finished.

† Throughout the paragraphs on Spindle-whorls the references, when not to illustrations in the letterpress, are to figures on Plate cxxxii.

the vertical edge; fig. 10 [II 30] has four faint scratches, as shewn in the drawing, on one face. The latter example is unfinished: the perforation has been begun on the ornamented side, but the opposite face has neither decoration nor trace of the drill. Spindle-whorls of alabaster are not unknown, but they are very rare; a double convex disc in this material came from IV 4,  $1\frac{3}{4}$ " in diameter.

Though the stone and bone *buttons*, presently to be described, are often plano-convex in shape, *spindle-whorls* of this form are not very common;

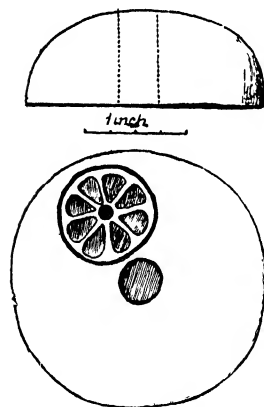


FIG 265—SPINDLE-WHORL

fig. 11 is a fragment of one example (found in waste earth). It was roughly ornamented with grooves. Another specimen here shown (fig. 265) was found in IV 5. It is of a green-coloured stone. The rosette cut on the base is a curious detail. Diam.  $2\frac{3}{4}$ ". A specimen was found in a Hellenistic cistern in trench 19 in green-enamelled porcelain; it was 2" in diameter. Peculiar also is fig. 12 [III 4] in limestone: this is of the shape of a Greek cross.

There are two or three varieties of spindle-whorls in pottery. Perhaps the commonest form is a simple disc, slightly convex in both faces, about 2"— $3\frac{1}{4}$ " in diameter. Fig. 14 is an example, from the Third Semitic stratum, in which stratum this type seems to be the commonest. In a variety the tube is strengthened by a collar, on one side only as in Pl. cxliv, fig. 18 (a large example from the First Semitic stratum), and Pl. cxxxii, fig. 15 (Hellenistic); or, far more commonly, on both sides as in fig. 16. This last example comes from I 30, but similar specimens were found in all the strata. An extravagant example is shewn in fig. 17, from I 4.

A few anomalous forms may be noticed. Small perforated sherds of a variety of shapes, such as fig. 18, were common everywhere, but are probably *not* spindle-whorls, they are too light. Some may be buttons, others merely accidental products—e.g. fragments of broken vessels which happen to have rivet-holes in them. For the same reason of lightness, the small disc of black ware, fig. 19 [IV 8], is probably rather to be considered as a button than as a spindle-whorl. Fig. 20 [from just under VI 16], which

appears to be of syenite or some such stone, is plano-convex, like fig. 11; it is peculiar for the hole drilled in the edge, which I cannot explain. Fig. 21 [V 16] is made of a flat stone, and is of an oval shape, uncommon though not unique, it is adorned with rudely cut radial lines. Whether such an object as fig. 22 [IV 2] is a spindle-whorl or merely a large bead, appears to me uncertain, I suspect the latter. It is of a Cypriot type, in compact reddish pottery. Fig. 266 [VI 4] represents an unusually elaborate spindle-whorl of soft clunch. It is 2" in diameter. A groove is cut round the edge and both faces are roughly ornamented with radiating lines. The half whorl of pottery (fig. 267),  $4\frac{1}{2}$ " in diameter, with two birds scratched on it, also came from the surface stratum.

There was one form of spindle-whorl which was almost as common as it was extraordinary. This was the spherical knob at the head of a human femur, sawn off and perforated. Specimens of this were found throughout all



FIGS 266, 267—SPINDLE-WHORLS

the Semitic periods.\* Analogous to this was a human patella, perforated, found in early Third Semitic debris on the top of the Inner City Wall, south side.

2. *Weavers' Weights* are found in every Semitic stratum from the oldest to the latest. There is a considerable variety of form, texture, and size in these objects in different periods. The principal types are shown in fig. 268. Those of the First and Second Semitic Periods are massive and clumsy (268 a), nearly half again as large as any of later date, conical in shape, and made of a very friable and powdery soft-baked clay. Following

\* It is possible that these may be amulets—indeed they are almost too light for spindle-whorls; they are, however, of the ordinary plano-convex form that is usual to either spindle-whorls or buttons. In one example from V 28 there were grooves traced horizontally round the side of the bone, otherwise (except for the vertical perforation drilled through them) they were not marked in any way. In III 28, however, there was one such femur—head sawn off but not perforated, with a row of four holes drilled in the surface forming a line crossing the top.

these, in the end of the Second Semitic period, comes a weight on a more or less rectangular or oval base tapering slightly (268*b,c*), and with the perforation passing through the two broad faces. Weights of this period are always very compact and hard baked; they are sometimes cylindrical (as 268*h*), and occasionally barrel-shaped. Sometimes, as in one found in cave 8 I, the weight is bell-shaped; and sometimes it narrows slightly just under the head, and then expands again, giving a neck to the upper part of the weight. A conical weight of about 3"-4" high (resembling 268*a* but smaller) follows during the Third and Fourth Semitic periods. They are sometimes impressed with a seal from a scarab, showing that they were made for weavers

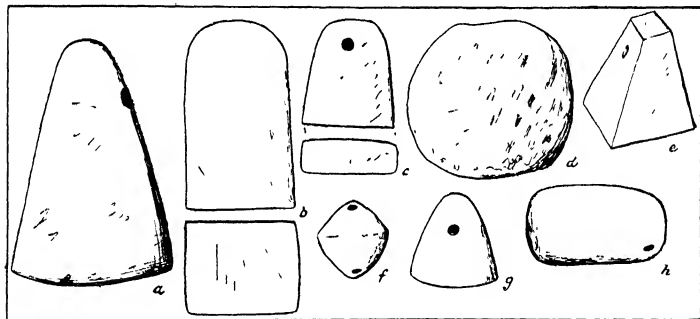


FIG 268 —VARIETIES OF WEAVERS' WEIGHTS (ABOUT  $\frac{1}{3}$  FULL SIZE)

by professional potters. I have not noticed any with *nailmarks*, but in a few there is a finger-print, or a depression made with a stick, on the top. In one found in IV 29 the base is hollowed, perhaps to lighten the weight a little. An unperforated specimen was found at the N. end of trench 3. At the same time spherical weights, about  $3\frac{1}{4}$ " in diameter, came into use (268*d*). These are much less well made than the conical weights, and possibly were moulded by the weaver himself to save expense. They are almost always merely sun-baked, and generally fall to pieces after being unearthed and, if wet, reduce to mud. A collection of seven such weights, each about 3" in diameter, was found inside a jar in V 15. Less common are hard-baked cylindrical weights, of which a typical example measured  $3\frac{3}{4}$ " in diameter,  $1\frac{1}{4}$ " high.

In the Hellenistic Period spherical weights are the rule, hard-baked and generally rather smaller than those of the preceding period; but small pyramidal weights on a square base (about 2" high) are also common\* (as 268 e); less common in this period are small conical weights on a circular base (268 g). These are generally much better made and more compact than in any of the previous periods. Unbaked cylindrical weights have also been found. Little spherical or double conical balls of clay about 1" in diameter are also very characteristic of the Hellenistic stratum (268 f). Usually there is simply a perforation through the upper end of the weight, or (in the case of spherical weights) along the axis. But sometimes in addition a cord-groove runs wholly or partly round the weight, or else over the top joining the ends of the perforation. As might be expected, weavers' weights are often found in large hoards, sometimes as many as fifty together; in one place in 27 VI eighty-seven were found together of the small pyramidal type.

Besides brick, which is the usual material, weavers' weights are sometimes found in soft limestone. This is especially the case in the Hellenistic Period. One from I 17 was ornamented on one of its sides by a row of impressed dots. This was the only attempt at ornamenting weavers' weights that was discovered. Sometimes rough stones are found perforated at one end for suspension, these most probably served the same purpose.

A flattish spherical pebble of red stone, about the average size of the spherical weights, with a hole neatly drilled through the centre, was picked up on the surface of the mound. This also was probably a weavers' weight.

It is a curious circumstance, not easy to explain, that large piles of weavers' weights are very often found associated with heaps of grain. The connexion is too common to be accidental. Thus, at the south end of trench 2, in a Third Semitic house, was found a pile of twenty-five bell-shaped weights, one of them with the impress of a cord running over the top, with them was a considerable quantity of barley. Again, in an excavation under the ramp of the S. [Maccabaeon] City Gate, some walls with characteristic vessels of the Second Semitic Period were reached. In one room was a chamber containing some thirty pyramidal weavers' weights, about eight of which were stamped on the top with a scarab stamp. Near this was a pit full of burnt *kursenni*, and a saddle-quern with two upper millstones. Did the weavers combine with the art of weaving the trade of the grain merchant?

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\* The pyramid is usually almost complete, but sometimes a frustum only. In a specimen from III 1 the edges of the pyramid were chamfered.



3. *Textile Fabrics*.—With the exception of two minute fragments, every vestige of textile fabrics had utterly disappeared. Of these, one was a small linen bag in which was enclosed a quantity of green paint. This contained fourteen threads to the warp and twenty-six to the woof in the square centimetre. The other was a fragment, about the size of a postage-stamp, of a cloth case, adhering to the bronze mirror found in the Philistine grave no. 4. This had eleven threads to the centimetre in the warp, nineteen in the woof.

Beside these, one jar-handle from IV 8 was found to have been tied round with a cloth before being baked. An impression of the mark left by the cloth was made in wax, from which it appeared that it had but seven threads to the warp and twelve in the woof in the centimetre. A clay seal, with the impression of a scarab, was picked up on the slope of the *tell*. The seal had been fastened on something wrapped in a cloth with the curious proportion of eight threads in the warp and twenty in the woof. The scarab seems to have been of the Hyksos Age, though of course this does not date the seal. In another sealing of the same kind found in waste earth, there

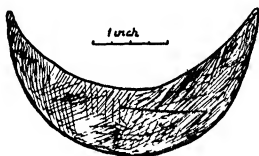


FIG 269—BRONZE DRESS-ORNAMENT

were sixteen threads in the warp and twenty-four in the woof, to the square centimetre, indicated by the impression of the cloth. There was also a bronze crescent [V 8] which had evidently been sewn on for decoration to a garment. It must have remained long enough on the garment to corrode, for the impress of the threads remains quite clearly on the side of the crescent. This cloth had nine threads in the warp and eleven in the woof. The crescent is represented in fig. 269. Length of the crescent from tip to tip, 3½"

It would naturally not be fair to judge the skill of the Gezerite weavers from these coarse examples. There is plenty of Biblical evidence that "fine linen" was familiar in Palestine, but what there may have been has perished.

4. *Skins and their Preparation*.—The skins were cleaned, probably, with the flat flint scrapers which it will be convenient to describe with the rest of the flints in the following chapter. After being dried and cured by methods on which the excavation had no light to throw, they were cut to the required shape, and sewn.

In all strata pointed slips of bone, about 3"-5" in length, were very common. These

probably served a variety of purposes ; some, for instance, may have been styli, for writing upon waxed tablets. But it is not unlikely that some may have been intended for pricking holes in skins to enable a thread to be drawn through them. Some were mere irregular strips roughly trimmed, others were carefully and regularly made, with symmetrical points. The peculiar knife fig. 270, found in fragments on the surface of the rock at the N. end of trench 17, was probably meant to help in cutting out and stitching skins—the spur at the back being for making perforations through which the thread was passed. The spur was *fixed* to the back, not hinged in any way as in some Egyptian implements.

5. *The Garments*.—The information available on the subject of the cut and appearance of the garments worn is of the scantiest. The only likely source of information would be the figures and statuettes found from



FIG. 270.—BRONZE KNIFE



FIG. 271.—GROTESQUE POTTERY FIGURE

time to time ; but as the majority of these are nude, there is little to be learned from them. Some strokes on the shoulder of a grotesque pottery figure found just above the S. [Canaanite] Gate, associated with objects bearing the name of Ramessu II, and here shewn (fig. 271), are suggestive of a cloak resembling the '*abayeh*' of the modern fellahin—a sleeved cloak of goat's hair, worn like a cope or a University gown ; it has also a flat cap, oddly suggestive of a "Tam-o'-Shanter" with six ribbons streaming behind, and braiding round the edge. A cloak seems also to be indicated in the rude stone figure, fig. 382, no. 8 (*post*, p. 232). The costumes of the figures on cylinders are hardly to be taken into consideration, as these probably reflect Mesopotamian fashions rather than Palestinian ; just as in the *Hekab* statuette described on a later page the dress is Egyptian ; and in semi-classical figurines from the Maccabæan stratum it is Greek. One or two heads of statuettes,

of which fig. 272 is a good example (from **Va 30**), possibly indicate that in the Fourth Semitic Period a head-dress resembling the Phrygian cap was worn.\*

Though we know so little about the garments, we can deduce something about how they were sewn and secured from a study of the needles, brooches, and pins of metal, and also the buttons of various shapes and materials that have come to light. Some particulars must now be given about these objects.

6. *Needles*.—Needles are pins with eyelets, but not all of the numerous varieties of pins with eyelets can be properly treated as needles. This term must be restricted to implements adapted for sewing; and all pins are thus excluded in which the eyelet makes a conspicuous expansion in the shaft (as in Pl. cxxxiii,† fig. 48).



FIG. 272.—HEAD OF FIGURE WEARING PHRYGIAN CAP

There are four methods whereby the eye can be added to a pin. The simplest is by looping the head end of the shaft, as in fig. 30 (**IV 4†**); next comes splitting the stem, as in fig. 50; the third is by hammering flat a section of the stem and perforating it, as fig. 53; and finally the eye can be cast on from the first, as in fig. 48. Only the first two of these can be called needles; and not even all of these, for in some the hook of the eyelet would catch in the cloth when being pulled through.

\* There is no justification for representing the ancient inhabitants of Palestine in the costumes of to-day. The modern popular representations, *e.g.*, of the Patriarchs in turbans, etc., may be almost as absurd as the mediaeval illuminations that exhibit them attired in European costumes of the fourteenth and fifteenth centuries.

† Throughout the paragraphs on Needles the references are to figures on Plate cxxxiii

‡ Small lengths of bronze wire with a more or less crooked top were found at all depths, figs. 24, 26 are typical specimens. These are probably minute needles of which the eyelet has opened

Fig. 33 is a typical example of the true needle, though its loop has become slightly opened. Some fine specimens were found in all the Semitic strata. It will be noticed that by the simple though ingenious device of narrowing the diameter of the wire, and turning the tip over to meet the shoulder thus formed, a projection that would catch on the cloth or skin was avoided. The narrowing may be gradual, as in fig. 33 [VI 26], or (more commonly) abrupt, as in fig. 35, which is typical of specimens from every stratum. An example similar to fig. 33, but with the hook open, so that the head bent at a right angle, was found in III 7. It was no less than 13" long. It is probable that the larger needles—such as fig. 35—were meant for sewing skins, smaller specimens of the same type being used for cloth. It is not common to find *fine* (i.e. slender) needles with this peculiar treatment of the eye. fig. 34 [II 28] and fig. 38 [V 3] are, however, examples; fig. 40 [V 20] is an example of unusual length. Looped-head needles are almost invariably circular in section, a square-sectioned needle was, however, found in II 3. In this the head was hammered flat before being looped. The length was 3½"

A second flexion of the looped head, giving an appearance resembling the traditional "shepherd's crook" to the needle, is not common. It can be seen incipient in fig. 31 [IV 4], well marked in fig. 37 [V 17], and in a closed loop in fig. 39, from Third Semitic debris.

Split-eye needles do not seem to appear till the Second Semitic Period. Figs. 49, 50 are good examples; in one the eye is at the top of the shaft, in the other it is a short distance down.

Cast-eye needles are also rare. Fig. 42, from the surface stratum, is an example. The hole is always a long, narrow rectangle or oval, as shewn. An unusually slender specimen is fig. 51 from II 28. On the other hand, fig. 52, from waste earth, is perhaps unusually coarse for this type.

Iron needles are unknown in all periods; but needles of bone are common. These are generally flat strips, tapering in width from base to tip, and perforated at the broader end. Unperforated, but otherwise similar strips of bone are equally common in all the strata; these, as suggested above, are possibly for pricking holes in skins or other tough material, through which a more delicate needle could afterward be drawn. A couple of examples are here shown (fig. 273, 1, 2), both from the rock stratum; the first (trench 29) is from the radius of a sheep, 4½" long. I am not sure about the identification of the second bone, which is 5½" in length (trench 30). The bone pricker (no. 3), 4¼" long, was found with the first of these. The fourth example, 3¾" in length, in the drawing is from the Third Semitic Period.

7. *Fibulae*.—Fibulae are rare in the earlier strata, and do not reach their full development till the Fourth Semitic Period.

In the earlier types the bow and pin of the fibula were separate

pieces. The bow, usually a massive square or circular bar of bronze, was hammered flat at the two ends; one end perforated, the other end bent into a hook. The pin, which must have had a knob at the head, was passed through the hole in the one end, and caught by the hook at the other. Pl. cxxxiv,\* fig. 2 [III 13] is a good example of this type. A late example, fig. 1 [VI 19], has the perforated expansion a little below the head of the bow, cf. the pin Pl. cxxxiii, fig. 53. It may be that the pin fig. 31 is from such a fibula; it was found on the surface, W. of the Maccabaeon Castle. In a variety of this type it was the pin which was looped, being prevented from slipping out of position by a knob on the bow. Such an example is fig. 11 [V 29]. Fig. 10 [VI 3] is a variety in which there is a second knob instead of the hook at the point end of the bow. This is practically the mechanism of the penannular fibula.

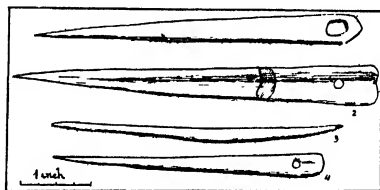


FIG. 273.—BONE NEEDLES

In fig. 8 [II 17], which has evidently become accidentally distorted, the head of the pin seems to have been caught between two knobs. Fig. 29 [V 12] is the best specimen of the penannular fibula found. Fig. 9 [V 3] has the peculiarity of not having any stop to prevent the loss of the pin. Fig. 7 is a similar case to fig. 1, with the expanding stop above the head of the pin. This also is a late specimen [VI 13]. Fig. 12 seems unbroken, but is too distorted for us to be quite certain of the method of fastening the pin: the hooks have opened to some extent. The hammered flat projection on the back is curious. This comes from the N. end of III 27. Fig. 15 [VI 13] is another obscure example; it is a flat band, bent at right angles at the head end. This bend must have been considered sufficient to prevent the pin from slipping. Analogous is fig. 20 [V 4].

\* Throughout the paragraphs on Fibulae the references when not otherwise specified are to illustrations on Plate cxxxiv.

which is a pin that probably was bent so that the point passed through the hole in the head. In the Fourth Semitic Period was introduced the device of making the pin one with the bow, and connected with it by a spring. In these the bow may be ( $\alpha$ ) uniform in diameter between the two ends, as in fig. 4, from the surface stratum W. of the Maccabaeon Castle, and fig. 22 [VI 30], which latter is remarkable for its small size (another small one is fig. 30 [V 7]), ( $\beta$ ) suddenly thickened at one end (fig. 14 [VI 10]), ( $\gamma$ ) thickened at both ends, which is the commonest (figs. 3, 6). These thickened portions are sometimes plain, as in fig. 24, but more frequently ornamented with faintly traced rings (as fig. 6 [VI 13]), or more or less bold mouldings, as fig. 3, an unusually fine example from the Hellenistic stratum. A good normal example is fig. 26 [V 12]. A rare example in which the thickening is *gradual* towards the two ends was fig. 18, found in waste earth. This specimen is quite plain. Large knobs, as in fig. 21 [V 28], are comparatively rare. Still rarer is a row of knobs, as in fig. 23, also from V 28

How such a fibula as fig 25 was fastened I do not understand. There is nothing to catch on to in the cylindrical projection, which is unbroken. This specimen comes from V 27.

Sometimes the fibula is found with the bow bent to a very acute angle. This may be accidental, or it may have been done afterwards to make the fibula still useful after part of the pin had been broken off. It is difficult to believe that fig. 27 was from the first meant to have so acute an angle. It comes from the Hellenistic stratum. The unexpected "find" of a Latène\* fibula, with the bow recurved beyond the hook, and with a double spring, was made in the earth overlying the great reservoir (fig. 16).

The vast majority of fibulae are of bronze, but a few iron specimens were found. The pin of an iron fibula, recognizable by its spring top, was found W. of the Maccabaeon Castle, and one fine unbroken specimen, fig. 5, was also discovered in the Hellenistic stratum. A wholly anomalous example is fig. 17 [VI 27], in this the bow is iron, the pin of bronze, inserted into a socket provided for it in the bow

Fig. 19 [VI 3] is perhaps a fragment of an unfinished fibula, under the moulded rings it ends in an oval flat disc, which it may have been meant to bend into a hook.

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\* I follow the orthography prescribed by the *Académie des Inscriptions*.

Probably the pin fig. 13 [V 17] is adapted to serve as a fibula. It is bent into the general shape of the normal fibula, the point being caught by the club-shaped head.

On the other hand, the fibula fig. 274, on this page, having met with an accident in the owner's lifetime, has been turned into a chain, by bending the back into one loop, and the ring into the other. This object came from the much-disturbed *débris* at the north end of trench 2.\*

A few objects of a more miscellaneous type are added to Plate cxxxiv, which may conveniently be described here. Fig 28 is a bar of bronze bent into a U with a hook at each end (one of the hooks broken). It may have been some kind of dress fastening, or possibly a very small bucket-handle. This came from V 30. Fig. 32 is apparently a girdle-fastening. Fig 33 [VI 26] is possibly one of the metal studs with which, as we have seen earlier in this chapter, the horse trappings were ornamented. Fig 36 is similar, and also from the surface stratum. There are four pins for securing it, in the base. I do not know what to make of fig. 34 [IV 4], which is much corroded. It may be a peculiar form of fibula pin or pendant amulet. Fig. 35 [II 20] is some kind of buckle or catch, possibly belonging to a box. Buckles are rare in the *débris* of the mound, though very common in the Byzantine tombs: see for example Pls cix 32, cxix 22, cxx 21; also the girdle fastening, Pl. cxviii 27. One or two buckles of another type (such as Pl cxxxiv, fig 42) may also be noted. Fig. 37 is probably the tongue of a buckle; and fig. 38, a bronze ring hooked and secured by a wire round it, seems to be some such apparatus. It comes from V 28. Fig. 39, also from Fourth Semitic *débris*, is probably a disc for the ornamentation of a garment, harness, or the like.



FIG 274 —  
CHAIN MADE  
FROM A FIBULA

8. *Pins*, though very numerous, are rarely of striking interest or variety. So far as I have been able to make out, there is no chronological evolution of form to be traced through the successive strata. The same types persist throughout, with extraordinary uniformity.

In describing the pins, we may divide them primarily into two groups—those without eyes, and those with. Both groups are found from the beginning.

The eyeless pins may be further subdivided into two, according to the shape of the section of the shank. Probably the majority have shanks

\* An analogous example of adaptation was a ring found in V 20, made from an iron nail that had lost its head, bent nearly round in a circle.

The plain fibula (fig. 43) from VI 6 has a small chain looped round it, from which probably some additional ornaments were hung.

circular in section; but a very large proportion are four-sided. The slenderest pins, some of them little more than a length of fine wire, are almost all round-shanked (Pl. cxxxiii,\* fig. 2, from the Hellenistic stratum, is an example of a thin *square* pin), as are also almost all the most massive, with a few exceptions, as fig. 5 [VI 13]. Of those that lie between these extremes, it would be difficult to say which class was the most frequent. A few are very flat rectangles in section. Fig. 4 [IV 20] is an example, another is fig. 23, from Third Semitic débris. There is another group, represented at Gezer by three or four specimens only. In these the shank is a flat ellipse in section. It is a modification of the ordinary four-sided type, in the normal examples of which the sides are equal, or all but equal, in breadth.

Some pins may be classed as composite: that is, the section is square at the head end of the pin, and more or less gradually passes into a circular section at the point end. The change may be abrupt, as in fig. 6, or more gradual as in fig. 7 (Third Semitic): and the proportion between the two parts of the pin may be as widely different as in figs. 7 and 8 (the latter from II 20). This seems to be a shape more specially characteristic of the Third Semitic Period. Fig. 6 is an example from trench 17. The converse—round above and square below—is never found, so far as I have observed.

The *heads* of the pins do not present much variety in the Gezer series. In a very large number, perhaps at least half, the head is not subjected to special treatment at all, but is distinguished from the point only by its bluntness, or at most by a slight thickening; as in fig. 1, a representative of a very common class. In these cases, in general, the shank tapers regularly from the head to the point, without interruption of the straight converging lines, throughout the whole course of the pin. In pins having a square upper and round lower end, the square portion takes the place of a head: in some the proportion of length of the square end to that of the round is so reduced that it can without straining language be described as actually a head (as in fig. 8). It is not common to find very conspicuous heads to square-shanked pins. Fig. 9, from the rock in trench 30, is one example; fig. 15, from the same place, is another. In the one the expansion is gradual, in the other abrupt. Never in *bronze* pins have I noticed any emphasizing, by means of a groove, of the point where the square section passes into the round. Fig. 11 [VI 16] displays this characteristic, but it is of *iron*, and was put on Plate cxxxiii by an oversight.

In cases where conspicuous heads are found, they are almost invariably

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\* When not otherwise stated, the references in the paragraphs on Pins are to Plate cxxxiii.



club-shaped expansions of the shank: examples of different shapes are fig 13 [VI 26]; fig. 14 [III 16]; fig. 61 from near the Syrian baths; fig. 63, an extravagant example, from I 29. See also the accompanying fig. 275*a*. The expanding head shows a limited range of variety in shape. It is long or short; ellipsoidal or spherical (fig. 16 [VI 20]); slight or pronounced. The ogee head of fig. 10 [III 18] is unusual: this pin has a square section and a chisel point. Compare the fragment, fig. 18*a*. A flat ribbon- or spatula-like head is occasionally found, as in fig. 12 (IV 16), 17 (II 30), 21 (II 20), 54 (Fourth Semitic). Compare also fig. 22. Ornate heads, of which fig 19 is a remarkable example, are all characteristic of the early part of the Third Semitic Period, when Aegean influence was strongest. The twist head, fig. 20, belongs to the time of the Twelfth Dynasty.

The flat top, shaped like an open umbrella, of which not a few examples were found in the Shephelah *tells*, is rare in Gezer. Fig 18 is a specimen. These all date from the Hellenistic Period. The Third Semitic pin, fig 29, is not an identical example. I am not sure whether the bend in the head is accidental or intentional; more probably the former, though its shape is suggestive of well-known Bronze Age types.

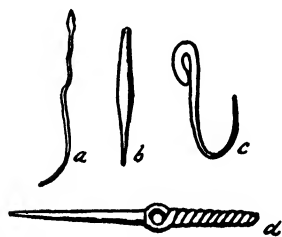


FIG 275—PINS

Occasionally the head *contracts* so that the pin is pointed at both ends. Several (not many) specimens have been found in which there was no distinction whatever between the two ends. In fig. 3 [IV 20] the head is in the shape of a chisel edge, the point an ordinary taper. The section of this pin is square.

The *points* of the pins, again, are subject to some variation. In all round-shanked pins it is a conical taper, like the point of an ordinary modern pin—either a taper of the whole shaft from the head downwards, or, much more rarely, a conical cap at the end of a shank more or less uniformly thick. In square-shanked pins the point is either similar to this—that is, pyramidal—or else chisel-shaped (Third Semitic), produced by the approximation of one pair of opposite sides and the consequent attenuation of the other pair. The pyramidal point is by far the commonest. In a few rare cases the chisel point expands slightly beyond the limits of the sides of the shank of the pin, so that it resembles a miniature spatula. In one example from V 3 the point was lozenge-shaped.

There remains a class without points, just as we have seen that there is a group without heads. Fig 25 is a good example, from the Hellenistic stratum. In these, either the shank is of uniform thickness throughout, with two blunt rounded ends exactly resembling each other, or (as in the selected example), it actually expands at both ends, so that we have a double-headed pin. Unlike the double-pointed pins, however, no specimen of this group was found in which the two heads were identical. one is always slightly larger than the other.

The double-headed pins must, I think, be classed as hairpins. The knobbed

point would prevent their being used in textiles, while not hindering their insertion in the hair: on the other hand, it would be useful in preventing the pin from slipping out. A handsome specimen ornamented with rings, found in a Byzantine tomb plundered by the fellahin, is shewn in fig 67

Two or three examples were found of fig. 43, a blunt-pointed pin with the angles of the head projecting into four small horns. They were found in late Fourth Semitic débris, but are probably of later date.

One of the finest pins found (from IIIa 30) is shown in fig. 276. It has a square shank and a head elaborately ornamented with alternating bands of spirals separated by raised ridges. The head is flat and expanding, and slightly undercut. There is a loop at one side. With it were found the bronze knife and socketed chisel also represented in the figure

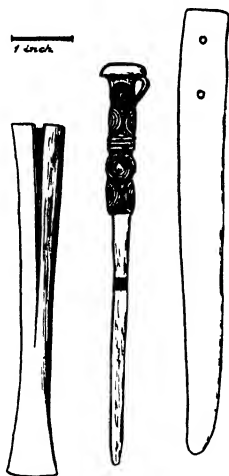


FIG 276 — BRONZE PIN, ETC

Pins with eyes differ in one respect from those without eyes. No *square-shanked* specimen was found, all belong to the round-shanked class. The classification, according to the formation of the eye, has already been indicated in the section on Needles. Examples of all the classes there specified were found, the first and fourth very common, the second fairly common, the third very rare.

Many specimens of fine wire with simple looped heads were found at all levels. Some, indeed, had a double or triple loop at the head, as in figs. 27, 28, but these were in most (probably in all) cases fortuitous, the apparent spiral head being simply the spring of a "safety-pin" fibula from which the pins referred to had been broken. Looped pinheads must, as already mentioned, be carefully distinguished from needles. As a general rule the distinction is obvious; fig. 32 [V 3], for example, could not possibly have been used as a needle. The same is true of the very common type represented by fig. 36 [III 18]. As a rule in pins of this class the stem is looped without further treatment; it is rarely hammered flat before looping as in fig. 62 [VI 7].

Many pins were found with the eye some distance down the shank; in some cases down from the head as far as midway, or even, in rare examples,

two-thirds or three-fourths, but in the majority about a quarter, of the length of the shank. In one or two the eyes were drilled on hammered spaces, and in at least one, fig. 50 [IV 4], it had been formed by splitting the shank; but in all except these few sporadic instances it was cast on.

Nearly all the most highly ornamented pins belong to the last-mentioned group, which is illustrated in figs. 44-50. The eye is a perforated circular disc or spherule that interrupts the course of the shank. In only a very few instances was the section of the shaft between the eye and the head left without decoration, as in fig. 44 from I 2. On the other hand, it is so rare to find the ornament extending below the eye, that I have a note of two specimens only, one found on the rock, south of the High Place Alignment, and the other in III 16. The decoration consists of spiral twists running up to the shank as in fig. 49 [III 3], or of the degradation of such spirals—that is, rings and mouldings surrounding the stem. Various examples of the latter will be seen in figs. 45, 46, 48—the last an unusually fine example, from IV 15. It is not impossible that these spirals are suggested by a fourth possible method of forming a pin's eye—namely, by bifurcating the shank, and, after leaving a space at the root of the bifurcation to form the eye, twisting the ends of the two branches together. In one specimen in silver this seemed to have been actually the way in which the eye was formed. In a pin of the type described in this paragraph from IIIa 27 there was a small gold annulet inserted in the eye. This kind of pin was probably introduced into Palestine from Cyprus.

In a pin found in V 20 the part above the eye was flattened into a tongue-like tang (fig. 53).

The very handsome pin no. 56, which is one of the finest pins found in the excavation, came from the Hellenistic houses around the Maccabaeon Castle. The ornate object fig. 41 is probably not a pin, but a spatula.

The objects above described no doubt had various purposes which determined their exact form. The outline of fig. 65, as shewn by the drawing (in which it is represented in two aspects), is entirely anomalous. It comes from the N. end of III 28. Also unique is the decoration of 64 [II 7], in which a strip of bronze is wrapped spirally round the pin-head.

In some cases the pin seems to have been either intentionally destroyed or at least made useless for its original purpose, and adapted for some other use. An extraordinary case is fig. 57 [IV 2]: it is unlikely that the contorted form of this pin should be due to mere accident. Numerous other examples, less extreme, were discovered in various places: such as fig. 55 [III 3]. With them may be compared the fibula above described (p. 82), which has been broken and made into a chain. It is difficult to say whether the hook-shaped object fig. 275c (*ante* p. 84)—which might be

taken for a fish-hook if there were any fish-ponds in the neighbourhood—be merely a damaged needle, or be bent intentionally into that form.\*

A number of minute pins, possibly shoe nails,† were found in all strata. These were a rather flat rectangle in section, expanding from the tip towards the head and then contracting again: length about  $1\frac{1}{4}$ " (fig. 59). Figs. 58 and 60 show varieties. See also fig. 275 *b* on p. 84.

Pins were sometimes fitted into an ornamental bone or ivory head, such as that figured in fig. 277 *b*.

Small pins and needles were kept in cases made of the hollow shank-bone of a bird, such as a crane, or similar long narrow hollow bones. Pl. cxxxiii, fig. 66 shows one such case with a slender needle still in it. It came from **Va 30**. A larger specimen,  $5\frac{3}{4}$ " long, is shewn in fig 276 *a*. This came from **II 5**. It contained two needles and a narrow triangular lamina of bronze.

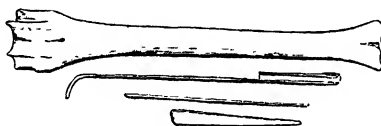


FIG 276 *a*—BONE NEEDLE-CASE

The small slip of bone, nicked at each end, shown in fig. 277 *c*, is possibly part of the fastening of a dress.

Though by far the commonest, bronze was not the only material in which pins were made. Iron pins are found, principally in the Hellenistic stratum, and there are a fair number of pins of ivory. Silver is also a not infrequent metal. A bronze pin gilt was found in cave **II 29**, but no pins in solid gold made their appearance.‡

Pins in iron follow the same general types as the simpler pins of bronze. No eyed iron pins or needles were found, and only the simplest form of

\* A small fish-hook, with the barb in a peculiar place, was found near the rock in trench **29**. It is shown in Pl. cxxxiv, fig. 40.

† Iron shoe-nails were found in every Byzantine tomb that contained anything at all. See for example Pl lxxviii, fig. 38.

‡ A few beautifully turned and polished pins of haematite were found in the Hellenistic stratum, but I suspect these were meant for playing some game such as *solitaire*, so describe them in the section on Games.

crooked pin, as fig. 278, no. 1, which came from the Third Semitic stratum. Fig. 278, no. 2 [VI 13], is a peculiar pin with a cleft head: it is possible that this is a tool or peg of some kind rather than a pin. Iron, as might be expected, is used rather for nails than for pins, and probably a large proportion of the apparent pins found in this metal are in reality broken fragments of the shanks of nails.

Pins are sometimes made of the leg-bones of birds, such as cranes, trimmed and polished. A collection of eleven of these was found all together in V 3. Fig. 277 *a* is a specimen with a simple ornament incised on it.

Of ivory pins the type commonest and most widely distributed over the strata is shown in fig. 278, no. 3—a bar about 4"-5" long, pointed

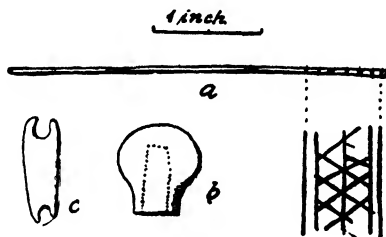


FIG 277—BONE PIN, ETC

at both ends. The example figured is from V 30, but precisely similar examples were found on the rock, as well as in the Hellenistic stratum. In some, as no. 4, one end is distinctly sharper than the other: this example comes from V 26. Small specimens, like no. 5, are sometimes found in the Hellenistic stratum: this example came from VI 4. These plain "pins" are possibly kohl-pencils, but they may also be hairpins, bodkins for pricking holes in skins, etc.

When the pin is decorated, the ornament may consist in the addition of a head (as fig. 278, no. 6, from Third Semitic débris, or no 7, also from Third Semitic, where the head takes the form of a hand, or some of the pins found in Byzantine tombs, where a variety of designs are found: see for example Pl. lxxix, figs 14, 15; Pl. lxxxvi, near bottom, Pl cxv, figs. 1-4. We should also notice fig. 279, which shews one of two bone pin-heads with incised ornament, found in early Fourth Semitic débris. The pattern of the other was identical. The ornament may also be cut on the shaft of the pin itself. In this case it is either confined to one end, which thus becomes the head (as fig. 278, no. 8, from IV 4, no. 9, from III 27,

where the ornament takes the form of four spirals—a similar pin, with three spirals, was found in the same trench on the rock—no. 10, from IV 20), or else is almost covered with frets, zigzags, and similar simple linear devices, as in no. 11 from III 29, and no 12 from II 4: the latter is also ornamented with beading. The spade-shaped bone pin no. 14 is from VI 5. Compare also fig. 277 *a*. The bone pin with a ring cut round the head (fig. 278, no. 15) is from V 5.

Silver pins are of one type only: that of the bronze pins with eye in the middle of the shank, and spiral ornament above. Fig. 278, no. 13,

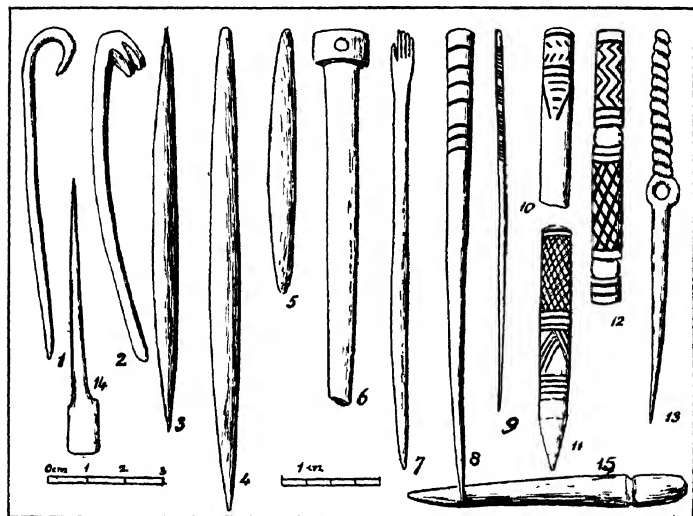


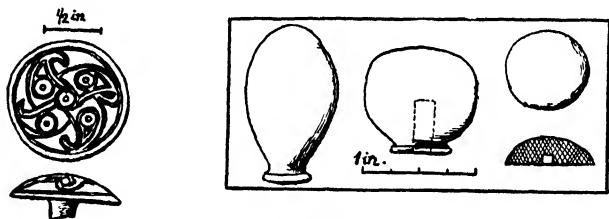
FIG. 278.—PINS IN IRON, IVORY, AND SILVER

from III 27, is an example. In fig. 275 *d* the spiral is an actual twist of two branches of the stem of the pin.

Pins were sometimes fitted into an ornamental bone or ivory head, such as that figured in fig. 277 *b*. Such objects as those in fig. 280 are probably thus to be explained as ornamental heads for bronze pins, though it must be admitted that none were found actually set on a pin. The first of these is in polished jasper, from the Third Semitic stratum; the second is in bone, from IV 17. The third, also in bone, was found in cave 8 I. The heights of the first and second are respectively  $1\frac{3}{8}$ "

and just under 1" the third is  $\frac{3}{4}$ " in diameter. Similar pin-heads, more or less rudely modelled in clay, were also found.

9. *Buttons*.—The modern methods of button and buttonhole were used for securing garments, and specimens illustrating the variety of buttons will be found on Plate cxxxii.\* As in the case of spindle-whorls, make-shifts are common in every stratum, consisting of discs of pottery cut from the sides of vessels and perforated. They are distinguished from the similar spindle-whorls by being usually rather smaller, and by having *two* perforations; such are figs. 37, 38, which are from the Fourth Semitic stratum. An unfinished example, cut from the disc-base of a vessel, was found in II 12: the one hole had been drilled through completely, but not the other. Similar buttons are also found cut out of



FIGS 279, 280—ORNAMENTAL PIN HEADS

clunch discs. Fig. 1 seems to have had three perforations, which is quite unusual; it was found in the cistern in VI 19. A *square* button of this sort (fig. 53) was found in II 13. A perforated button disc of unusually large size ( $2\frac{1}{2}$ " in maximum diameter) was found in VI 19. This is ornamented with two small depressions which do not go through.

Discs of pottery of small size, not perforated, were found frequently. These were usually about the size of a halfpenny, and carefully ground to shape, generally with bevelled edges. It may be that these were prepared for perforation and not completed; or else wrapped round with cloth and sewn to the garment. On the other hand, it is not improbable that these are *not* buttons at all, but draughtmen. Flat water-worn pebbles were also often found. These may have likewise been button cores or draughtmen.

\* All the references in the paragraphs on Buttons are to Plate cxxxii unless otherwise stated.

One of the commonest types of object is a small button of stone (generally diorite, more rarely quartzite, and yet rarer, clunch) or ivory. These were found almost daily in every stratum. They have flat circular bases, and a top which is either conical (as fig. 33), a more or less flat segment of a sphere (as figs. 26, 35), ogee (as figs. 27, 31), or moulded (as figs. 29, 32). They average about  $\frac{3}{4}$ " in diameter. The base is usually not so well finished or so highly polished as the upper surface, though sometimes a ring is drawn round it, just inside the margin. A perforation is drilled vertically through the centre of the object in all but a very small minority of cases.

As a rule these objects are too light to serve the purpose of spindle-whorls, and the perforation is too narrow for the end of the spindle. Some of them may be the ornamental heads of wooden or ivory pins. My own impression of them, however, is that they are to be explained as ornamental buttons, a cord being supposed to pass through the cloth and the hole in the object, and to be knotted at each end. Fig. 58 is an unusually small example, it is of polished diorite, from the Fourth Semitic stratum. A similar one, slightly less ornate, was found in IV 8.

The imperforate specimens, as figs 24, 25, are probably to be explained as draughtmen, like the imperforate discs of pottery. Fig 24 is Egyptian, in green enamelled porcelain; it was found in V 17. Fig. 25, from the same place, is also Egyptian, it is ornamented with a green glaze, on which curved lines are traced in red. Some double convex ivory discs with ornaments upon them, which are described in the next chapter as game-counters, may here be referred to, as it is conceivable that they are not some kind of ornamental button.

Of the others illustrated in the Plate a few notes may be given. Figs 26, 27 are both in ivory, from thirteenth-century debris in trench 30. The comparatively elaborately moulded specimen, fig. 29, is diorite, from the rock in trench 29. Figs 31-34 are also diorite, from Va 26. This series of four well illustrates the variety of shape. Fig. 35, from waste earth, is one of the few stone buttons of this type, with incised ornament upon it. It has a row of oblique strokes round the base. One ivory example, found in waste earth, had been coloured red.

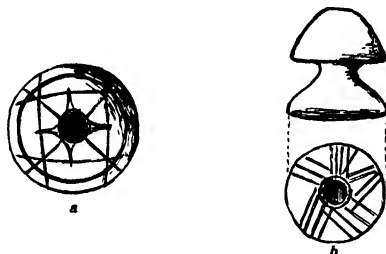
Ivory being a more tractable material than stone, we find that the majority of the buttons in the latter material are left plain, whereas a fair proportion of those in the former bear simple linear ornaments. These usually consist of single or multiple radiating lines, with or without feathering at the ends; or else combinations of punch marks consisting of groups of concentric circles. Specimens of these will be seen in figs. 40-49. It will be noticed that there is often a strange irregularity in the setting out of the pattern; thus there is an extra line in fig. 40, which upsets



the symmetry of the pattern, while in fig. 46 one of the groups of lines is suppressed altogether.

Of these specimens fig. 40 came from II 17; 41 was in the débris outside the wall, under the Maccabean gateway; 44 from waste earth; 45 from Va 30; 46 from V 26; 47, 48 from waste earth; 49 from II 5. Fig. 51 is of unusual size, and the ornamentation is unusually minute; it comes from IV 4. Fig. 54 is from the rock near the Philistine graves. A curious and effective example from V 6 is shewn in the accompanying fig. 281 a

It is not often that these objects are found in *pottery*; the coarsely moulded one, fig. 61, from V 17 is an example. Figs. 62 and 63 are



FIGS 281—BUTTONS

examples of the rare case of the base of these plano-convex buttons being ornamented, not the convex side. The first of these, which is in slate, is of small size. It came from V 4. The second comes from V 28. Fig. 64 is a conical button of porcelain covered with a grey glaze or enamel. It is decorated with a row of small knobs round the edge and a number of ridges on the body.

Besides these plano-convex circular buttons, other forms are found. Flat circular discs, usually of bone or of ivory, but sometimes of clunch, perforated in the middle, too small for spindle-whorls, are evidently analogous to them. Such are fig. 28, found in II 13, which is of bone, and fig. 43, of pottery, from V 29. A specimen in jasper,  $1\frac{1}{4}$ " in diameter, was found in II 2. Fig. 60, from II 17, has a milling on the edges. It is of ivory. Figs. 43 are in limestone: the former is ornamented on both surfaces, which is unusual. These discs are not always circular. Lozenge-shape, as figs 13, 23, are found (generally in the later strata, though fig. 13 came from III 18), and always of bone or ivory; also cylindrical bars, perforated through the sides, which may or may not be ornamented with moulding. Fig. 2, from V 29, is a plain, fig. 30 from the large central reservoir

an ornamented, example. The small globular ball of clay, fig. 3, also from the reservoir, is likewise probably a button.

Buttons with two perforations are also made specially in pottery, but these are far rarer than the makeshifts. Fig. 39 is a good example; it was found in waste earth. Stone buttons with two perforations are distinctly uncommon; fig. 42 is an example (also from waste earth), very peculiar for the oblique direction of the holes. Similar to the last is fig. 52, of shell, from **V 27**. In this the base is slightly concave.

An entirely different type of button is represented in figs. 36, 50. In these there is no perforation, but the button is a bar so turned as to form a waist round which a string can be tied. Fig. 36 was from **V 16**, and fig. 50 was picked up on the surface of the ground by one of the boys; the former is in ivory, the latter in a greenish basalt-like stone. Fig. 55, in ivory, is from **IV 16**. A handsome specimen from Fourth Semitic or Hellenistic stratum is fig. 56, in a polished black and white marble. Another, found in Fourth Semitic debris, was of alabaster. The wasp-waisted button in stone, fig. 281*b*, is a kind of cross between the two forms. Here a button of the kind is perforated longitudinally. It is of late Fourth Semitic date.



FIG. 282—SLAG  
BUTTON

A yet further development is shewn in Pl cxxxii, 17*a*, where a button of this kind is perforated transversely. It comes from **IV 29**.

Fig 59 is prepared from the top of a spiral shell perforated longitudinally, the perforation breaks through on the concave side of the shell. It was found in tracing the city wall.

The button of slag,  $1\frac{5}{8}$ " in diameter (fig 282), from the Third Semitic stratum, has three holes at the margin. It is probably intended (like the bronze crescent alluded to on p. 76), to be sewn on to a garment for its decoration.

### (b) Personal Ornament

Having now described the available evidence regarding the dress of the Gezerites, we proceed to discuss the adornments with which they decorated their persons. These consist chiefly of pendants, rings, and beads. As there can be little doubt that most of the *pendants* worn by the inhabitants had primarily a prophylactic value as *amulets*, and that their aesthetic purpose

was secondary only, the description of such objects belongs properly to Chapter X. We therefore for the present confine our description to the various kinds of *rings*—including bracelets, armlets, and anklets—and *beads*, together with a few ornaments of a miscellaneous kind.

We may, however, here mention the little gold pendant, fig. 283, which was found in a cistern, into which it had probably fallen from the head of some girl when she was drawing water. It is a circular disc of gold, ornamented with dots *repoussé*, and with a tongue at one side coiled into a loop for suspension.

The materials of which ornamental objects were made, so far as they have been preserved, were shell, gold, silver, bronze (especially), lead, and ivory, as well as the various pastes, enamels, and more or less precious stones of which beads were made. Glass slag was also occasionally used, as in the button shewn above, fig. 282, and glass itself in the late periods represented by the Byzantine tombs. Ebony is found in one or two Byzantine tombs: the fine bracelet fig. 284, no. 2, from one of the El-Kusah tombs is in ebony.



FIG 283  
GOLD PENDANT

Large piles of small bivalve shells from the sea-shore of Jaffa, pierced at the hinge, were found in the excavations from time to time. I thought at first that the perforations were made intentionally, for stringing; but on examination of the shells strewn on the beach, it was found that they too were perforated, so that the hole was due to natural causes. This proves that though the living molluscs may have been brought up from the shore for food, the dead shells also were brought up for ornamentation\*. Thus, twelve shells of the *Phasianella* were found in the Third Semitic stratum in trench 2, south of the Maccabaeen well. *Cardium* was, however, the commonest, as it is the commonest shell at Jaffa; piles of twenty or thirty were not infrequent in all the pre-Hellenic strata.

It might be expected that the ornamental metal *par excellence*—gold—would be used in greater quantities than proved to be the case. That there was very little is a circumstance for which the excavator cannot be too thankful, for in the East the apparition of gold possesses something of the nature of a theophany, and produces a corresponding excitement in every individual, gentle or simple, within a radius of many miles, whether connected with the excavations or not.†

\* Also, as mentioned in a previous chapter, for making cement. See Vol. I, p. 179.

† Two incidents, though trivial in themselves, are worth recording as illustrating the impossibility of keeping secret the results of excavation, and the rapidity with which news

There are two causes that tend to a reduction of the amount of gold. In the first place, the analogy of modern oriental social conditions suggests that a wealthy man would be afraid to make too ostentatious a display of his wealth, for fear of attracting to himself the unwelcome attentions of the local despot. Though the Abû Shûsheh fellahîn (whose lives present many marked points of contact with those of the ancient Gezerites) are quite as childishly fond of fine clothes and ornament as any *bourgeois gentilhomme*, they prefer to spend what wealth they have or can acquire (by robbing tombs and other nefarious practices) on wives and other cattle, the possession of which does not draw so much notice upon their individual selves. In the second place, as the chief business of a king in the ancient East was the plundering of other people's property, and no kings were more expert in their profession than the kings of Egypt, we can hardly expect much gold to remain in a city of which at least three captures by Egyptian kings are recorded. Silver, like gold, is not very common, no doubt for similar reasons.

The use of gold leaf as an ornamental material will be noticed in the section on Metal-working in the following chapter. As specimens of gilding applied to bronze we may here mention the bracelets from Philistine tomb no. 5, described Vol. I, p. 294; also a little concave disc, perhaps the head of a stud, about  $\frac{3}{8}$ " in diameter, found in the Fourth Semitic strata.

1. *Rings* (finger-rings, bracelets, anklets).—As in the case of the other bronze ornaments, I have been unable to find any very definite indication of a chronological evolution in shape or technique among the rings unearthed. The classification here set forth cannot therefore be correlated with the stratification.

Finger-rings, bracelets, and anklets, which do not differ essentially from one another, may be described together. They were made either by bending a straight wire or band of metal into a circular shape, which is the method universally followed in the earlier strata; or by cutting out a circular belt of metal from a flat plate. This latter method of formation is followed in the case of numerous rings found in late tombs. They are probably ornaments for fastening to dress, or for some such purpose,

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travels over a wide area. When the two ingots of gold described in the following chapter were found, I took every precaution possible to prevent the fact becoming public; yet I heard afterwards that the fame of them had reached Haifa, and that in the process of transmission they had grown into the life-size statue of an elephant in solid gold! When tomb no. 8 was being cleared one afternoon, I chanced to remark to the foreman that its peculiar series of apses made one think of a church. This remark must have been overheard by the two or three workmen employed in the excavation, who prated about it in the evening after sunset. Early the following morning word had reached Jaffa that a church had been found, and about 11 a.m. a man from there arrived on horseback and asked to see it.

and not for wearing on the person, for which they would be evidently very inconvenient.

In the ordinary form, made of a wire or band, the original wire may be uniform, as in Pl. cxxxv,\* fig 44, or varying in section throughout its length, as in fig. 43. In the majority the section is circular, of uniform diameter, though a square-section wire is not unknown. A lozenge-shaped section, as in fig 45, from VI 26, is rare and I think unknown except in the Hellenistic stratum. Flat bands are also common, as fig. 46, from Va 30; also bands convex outside concave inside, as fig 47 [II 18] in a few cases the edges are slightly strengthened by a thickening. In others the wire is pointed at both ends and swells in the middle as in fig. 43.

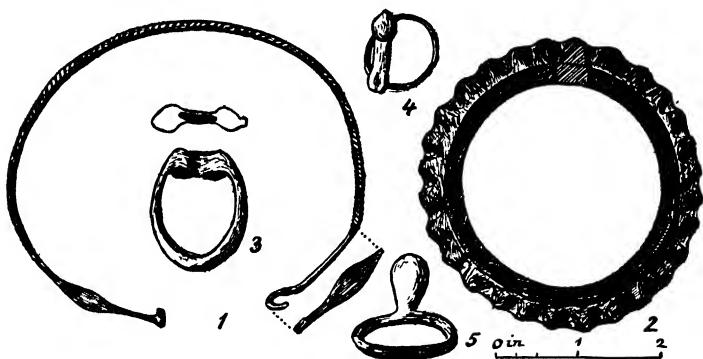


FIG. 284.—BRACELETS AND RINGS

The ends are brought together and may approximate, with a more or less wide space between them (as in the anklet fig 48 from VI 30), meet, as in fig. 50 from V 26; or overlap as in figs 44, 46. One receives a general impression that in flat band rings and in rings with sharp ends to the wire they usually overlap as in fig 44, in rings with uniform circular section and blunt tips they generally meet, but there are so many exceptions that no definite rule can be laid down. Indeed, the form of any ring may not be its original design, but a distortion. So extreme a case of overlapping as fig. 41 [V 19] is most probably due to distortion.

The ends thus brought together are either left open, and the elasticity of the metal alone trusted to, to maintain the shape of the ring; or else they are secured by twisting or welding. Specimens shewing the latter process have been found in the earliest strata. Twisting, which would evidently make the ring uncomfortable

\* References throughout the paragraphs on Rings are to Plate cxxxv unless otherwise stated.

to wear on the finger, is not common in finger-rings. A good example from 20 III will be seen in fig. 43. Fig. 51 (picked up on surface) is another good example. The fine armlet, fig. 27, found in débris of the beginning of the Third Semitic Period, above the inner city wall at the S. side, has the ends secured by a wire passing through two holes in the expansions, and twisted in a spiral—the ends being coiled round the arms of the wire. A different function is served by the wire in fig. 28; this specimen was found in waste earth. Here the wire ties together two independent loops, which together make the bracelet.

Bracelets with the ends hooking in one another are rarely found in the débris on the mound, though common in the tombs. An example is fig. 284, no. 1, from one of the tombs in the field called *El-Kusah*.

As a rule the rings have no special ornament; but examples of ornament, both in form and in applied decoration, are not unknown. A favourite method of enhancing the decorative effect of rings is by clubbing or expanding the free ends, as in the bracelet, fig. 42, from V 26. This is commoner in rings made of flat bands than those of bars or wires, but clubbed ends to bars are not altogether unknown, as in fig. 33. This specimen was picked up in the piece of land known as *Wāret Shakf Hammad*. Analogous to this, and yet more uncommon, is a knob in the course of the wire, as in fig. 34, from the Hellenistic stratum (to which I think the few specimens of this kind are entirely confined). In fig. 35 there are three such knobs. The iron finger-ring fig. 284, no. 5 has a knob bent at right angles to the loop. This specimen, unique at Gezer, was found in waste earth.

The decoration of the surface of a flat band ring is uncommon. A few examples were found in the Byzantine tombs. The simple moulding of fig. 35 *a*, from Va 30, is a comparatively early example.

Moulding and beading, as in the bracelet fig. 40 and the finger-ring fig. 49 (both from the Hellenistic stratum, but the latter probably early in the period) are unusual. I have no note of any example earlier than these.

A few rings were found in the Byzantine tombs like fig. 284, no. 4, which consists of a bronze ring with a drop-shaped pendant of glass strung upon it.

Rings consisting of twisted wire are found in the Hellenistic stratum, but are rare; fig. 38 is an example. Two armlets of twisted silver wire were found in the Maccabæan cistern called tomb 103, as well as a twisted bronze ring. Still rarer is the ornament of a spiral twist of wire round the body of the ring, as in fig. 39 (from V 15). A double-pointed pin, curved into a C-shape, was found in V 29. It had a double bronze wire wrapped round it, between the coils of which was a line of iron rust, shewing that a third wire of iron had also been wound upon it. This interesting object is figured in Pl. cxxxiv, fig. 41.

Especially in the uppermost stratum, small nodules of glass of various colours, or of enamelled paste, were not uncommon. These were hemispherical in shape, and measured about  $\frac{1}{4}$ " more or less, in diameter. Probably they were settings from finger-rings: similar cheap settings are to be seen in the jewellery of the modern fellahin. The iron ring fig. 284, no. 3,

which seems to have been a thumb-ring, is evidently intended to receive such a setting. It was found in one of the *El-Kusah* tombs. The oval ring fig. 32 [IV 16] is evidently a fragment of some larger object. The small size of the greater number of the finger-rings shews that their use was almost confined to women. A common diameter is  $\frac{3}{4}$ ". What may be the purpose of the small ring fig. 31 it would not be easy to say; the opening is less than  $\frac{1}{2}$ " in diameter. It was picked up in one of the fields round the mound. It cannot be an earring, like other small rings of about

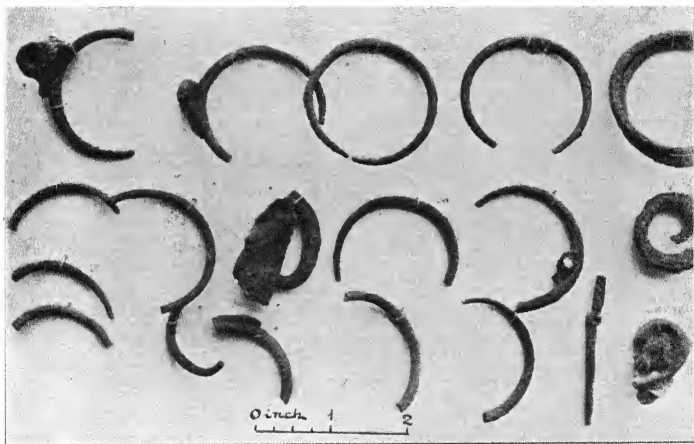


FIG. 285.—HOARD OF SILVER BRACELETS

the same size, as there is no open end, though it might be a pendant hanging from such an earring.

Armlets, worn on the upper arm, seem to have been more common in the later periods than in the earlier. They are a rare ornament in the earlier "Astarte" plaques, which are a good indication of contemporary fashion in ornament. They are, however, not unknown in the earlier strata. A specimen, consisting simply of a stout bar of bronze bent round in a circle so that the ends overlap, was found in III 20. The injured armlet, fig. 23 [V 30], has a paste bead strung on the surviving end. On the other

hand, bracelets for the wrist are common in all periods. The majority, like the finger-rings, are simple loops of metal. A large proportion must, from their small size, have been meant for children. Bracelets of iron were found in various late tombs, and one or two in the later strata. Plain finger-rings of iron were also found in the same contexts. But most of the iron rings found were more probably parts of implements than personal adornment.

A fine finger-ring in gold, from **IIIa 29**, is shewn in Pl. cxxxvi, fig. 16. It consists of a thick gold plate bent round in a hollow tube, and ornamented with ribbing.

Silver and gold rings are comparatively few in number and small in size. They are of the same shapes as the corresponding ornaments in bronze.

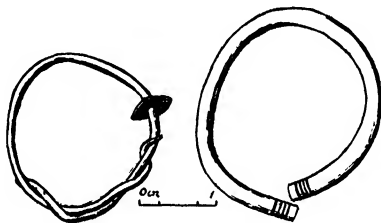


FIG 286—SILVER BRACELETS

In a house of the Fourth Semitic Period in trench 3 were found six silver bracelets rusted together, similarly to the fragments shewn in Pl. cxxxvi, fig. 3. Probably they had been worn as a group of bangles, after the fashion of the multiple bracelets shewn on some of the "Astarte" plaques. Fragments of another bracelet were also found, and with them was the following assortment of objects: a three-legged stone mortar, of the kind described on p. 39, diameter 10", a cooking-pot of the kind characteristic of the period, a cylindrical jug, resembling fig. 322 (*post*, p. 162); some flint knives, some of them remarkably thin; fragments of two bronze rings, 1" in diameter; a plain scarab of amethyst, two ivory plano-convex buttons; ten inlays, decorated with a feathering of oblique lines along one edge; a fragment, 3" long, of a large silver pin, with eye on the shaft and a twist-pattern above; a small bronze button(?), and a jug, 8½" long, with pointed base.

Another hoard of a similar character belonged to the surface stratum, from trench 17. The stratification was here rather disturbed, the Hellenistic debris having to a large extent disappeared, these objects therefore must also be assigned to the Fourth Semitic Period. They consist of the eighteen fragments of silver bracelets shewn in fig. 285, and the small hair-pin likewise shewn there, three long narrow upper millstones, a round shallow stone dish, perhaps a mortar, a three-legged



stone mortar ; and a small oval mortar, 3" in diameter, which has a red deposit in the hollow, having apparently been used for grinding paint. There were also some fragments of bronze pins.

A plain circlet silver finger-ring was found with the First Semitic débris in the Crematorium, as well as a tiny slip of wire of the same material bent into a spiral loop.

The silver bracelets shewn in fig. 286 were found in III 4. The first is of fine wire looped, and is closed by interlacing the ends. A lozenge-shaped bead, also of silver, is strung on the wire. The other is a bent bar, ornamented with lines cut at the ends. Two others resembling the latter were found, and all four were rusted together with a distorted fragment of silver, apparently some kind of buckle. The last-named object was too much injured to be exactly described. It seemed to consist essentially of two plates furnished with looped tails meant to interlock and to be secured by a rivet running through them, just as in an ordinary hinge. Part of such a buckle (in bronze) from VI 20 is shewn in Pl. cxxiv, fig. 42.

Signet-rings are found in two periods—that of Amenhotep IV, fragments of whose characteristic porcelain rings were found ; and in the Hellenistic Period. A description of these properly belongs to the section on Seals in the following chapter.

In the latest periods signet-rings of metal are not uncommon, but they are more frequent in the Byzantine tombs than in the Hellenistic hill débris. They consist of simple loops of metal with, at one side, an oval or a shuttle-shaped expansion. Very frequently the signet is a dummy, bearing no device ; and when there is a device, it is usually impossible to make out, owing to corrosion. The metal of the signet-rings found on the *tell* is always bronze ; but in the Byzantine tombs iron predominates. In *one* out of a very large number of iron signet-rings that passed through my hands there were what might have been faint traces of a device : in all the rest the device, if any, had been hopelessly eaten away by the corrosion of the metal.

Fig. 26 is a quite peculiar dummy signet-ring that was picked up on the surface of the ground, and is possibly of Arab workmanship. The ring is open intentionally, not broken, evidently to make it fit a finger of any size. I have not seen elsewhere a ring of this type.

Signet-rings were not always worn on the finger. On the surface of the ground a signet-ring was picked up so small (it was only  $\frac{9}{16}$ " in diameter) that it must have been suspended from a chain. In others the loop, which does not appear to be distorted, is too long and narrow to pass over a finger. This is especially the case with early gold rings in which scarabs are mounted

as a swivel. The minute ring from II 4, shewn in fig. 25, is probably an earring.

The rings above described have all consisted of single wires, or at least a second wire (as in fig. 27) has been subordinate. A few were found that were made of more than one wire. Two interlacing loops, as figs. 36, 37, were very rare: possibly they are to be treated rather as chain-links than rings. Fig. 36 was from III 26; fig. 37, which belonged to the end of the Third Semitic Period, or a little later, was anomalous, in that one of the rings was of bronze, the other of iron. The bracelet fig. 29 consists of a twist of two wires; it is from the rock in trench 8. Similar twisted wire bracelets were found in the tombs.

Bracelets of glass are very common in the latest tombs. These are usually of a dark brown or almost black colour, and decorated with rope-like nicks on the outer surface. Numerous examples will be found figured in the plates of tomb deposits in Vol. I. A few specimens (such as those in tomb 30) were found of diversified colours. Fig. 284, no. 2 is of ebony, which is a rare material. It was found in one of the Byzantine tombs on *El-Kusah*.

2. *Earrings*.—The normal form of earring is that shewn in Pl. cxxxv, fig. 30a. The wire has a thick club at one end, and is drawn to a sharp point at the other. The club end is curved and the sharp point is bent, so that the general shape of the ornament is triangular.

An oval shape such as fig. 31a is sometimes found, but this is less common than the triangular. These earrings are more frequent in silver than in bronze, though the latter is common; the range of time is from the Second to the Fourth Semitic period. Fig. 32a, which like the last-mentioned specimen was found in the surface stratum near the Maccabaeon Castle, is a late example. This differs from the rest, in the thick head being a flat, not a clubbed, expansion. Fig. 30 is an early example of this class of ring from the Third Semitic Period. This displays a clubbed point to the thick end, that is never found in the later examples.

Pl. cxxxvi, figs. 4, 5 are silver earrings of this form. The same shape was found in a Second Semitic cistern, at the S. end of trench 10, in gold, and another gold specimen is shewn in fig. 287. There is, however, another form of earring, less common, which does not happen to have been found in bronze. It is characteristically Second Semitic. It consists of a wire, thickest in the middle, drawn out to a point at each end. In the middle

there is a knob. Some moulds for casting these objects show that the knob was sometimes composite, *i.e.* consisting of three or four pellets adhering together; a specimen is Pl. cxxxvi 6*a*, from waste earth. Pl. cxxxvi 6 is a simple example. Pl. cxxxvi 1, which, however, came from the Hellenistic stratum, is a cross between the two types.

Another type of earring, with two knobs on the thick end, will be seen in Pl. cxxxvi 7. This was found in VI 15. Other examples of gold earrings are Pl. cxxxvi 15, 17 (the latter from the Maccabean Castle), and the three from the lowest strata, shewn in fig. 287.

The small nondescript object Pl. cxxxv, fig. 24 was picked up on the surface of the ground and very probably may be comparatively modern. It consists of a flat band ring, welded, with a pin through a hole in its

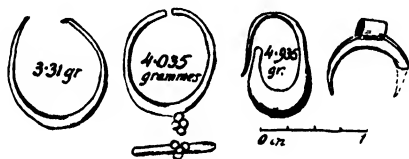


FIG 287—GOLD FARRINGS AND PENDANT

side, kept from coming away by a knob on the inside. At its outer end the pin is broken; it terminates at present in a spiral.

A small hoard of ornaments found in IV 10 forms the collection represented in fig 288, and was evidently the jewellery of some Gezerite lady of the time of the XIIth Dynasty or of the Hyksos. The objects were deposited in the bottom of a broken vase which is shewn (to half the scale) in no 1. It is of light drab ware, and is ornamented with faint combing, encircling the lower part of the base. The hoard consisted of two scarabs in steatite, one of them unmounted, the other set in a silver ring, and the following objects, all without exception of silver: (1) Two hairpins, one of them  $4\frac{3}{8}$ " long, the other broken, with an eye on the centre of the shank, above which is a spiral head and below which is a tapering point (nos. 4, 5). (2) About twenty-five beads, four of which are shewn in no 6; their appearance will be sufficiently understood by a glance at the illustration. Most of these were corroded into a solid mass. (3) Four small rings, consisting of loops of silver, the points not quite meeting; thickest in the middle and tapering to the two ends. In two of these—which are earrings—a small sphere of metal projects from the side of the ring (nos 7–10). (4) A pendent crescent, with a loop for suspension (no 11), and a small crescent cut from a flat disc of silver with two holes for sewing to cloth (no. 12). (5) Six bangles, all similar, con-

sisting of plain loops of silver, thickest in the middle and tapering to a point. The external diameter is only  $1\frac{3}{8}$ " Three are shown in nos 13-15, the others are similar. (6) A strip of silver folded up spirally (no. 16). (7) Some miscellaneous laminae of silver, quite shapeless, evidently fragments of one or more destroyed ornaments. These are corroded into small lumps, and I found it utterly impossible to dis sever them, or to detect to what kind of object they may have belonged. Some of them seem to have formed part of a small silver chain. The two scarabs (nos 2, 3) bear the spirals and symmetrically disposed symbols characteristic of the scarabs of the XIIth Dynasty. I have added to the figure a scarab of the Hyksos king Shesha, which was found on the same day and on the same level, a short distance from the spot where the vase was deposited.

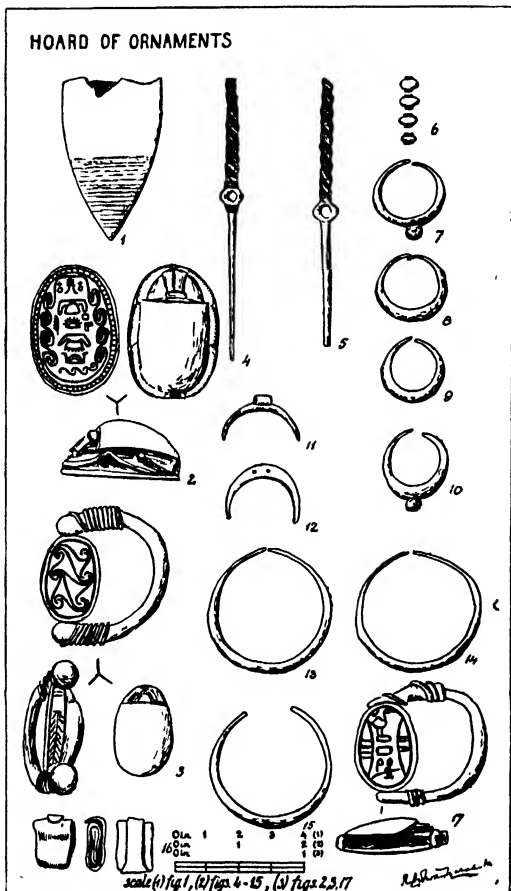


FIG. 288.—HOARD OF ORNAMENTS

3. *Beads*.—Of all the personal adornments from the excavation, by far the commonest and the most varied are the beads, found in profusion in every stratum. Indeed so extensive is the variety of size, shape, colour, and material, that it is difficult to suppress a feeling of despair at the beginning of any attempt to classify them.

They are of every gradation of size, from a pin-head to a pigeon's egg. They are spherical, spheroidal, cylindrical, square, barrel-shaped, single, double, multiple, and of many other shapes, some very peculiar. They are black, white, red, blue, green, purple, and of every other possible colour; some also display a variety of combinations of colour. They are made of stone, bronze, porcelain, cyanus, glass, pottery, resin, amber, and of other materials.

As a rule they seem to follow the pattern of contemporary types of Egyptian beads. Indeed a very large proportion of those found in Gezer are evidently direct importations from Egypt.

It is not improbable that many beads were not mere ornaments, but had a magical value as well, as they often have in modern Palestine. Thus I was told that a carnelian tooth-shaped pendent bead, about 1" in length (Pl. cxxxvii b,\* fig. 1), might now be worth as much as forty francs as an amulet against certain kidney disorders, this specimen was picked up on the surface of the mound before the beginning of the excavation. Spherical beads of the same colour (red) are valuable for ophthalmic troubles. Blue beads, as is well known, are worn universally to ward off the evil eye. Stones of blue with red veins shot through them, which are worn in rings on the finger, are supposed to be of use as styptics in cases of excessive nose-bleeding. The stone is smelt and then pressed on the middle of the forehead, whereupon the flow of blood ceases!

In the following paragraphs some particulars will be given about the types of beads associated with the different periods. It cannot, however, be claimed that the subject—which might, indeed, be elaborated indefinitely—is exhausted. Further details about beads, which need not be repeated here, are found in other parts of this work, especially in the chapter relating to the tombs.

*Pre-Semitic Period*—I have no note of any beads certainly referable to this period.

*First Semitic Period*—Some of the types most common throughout the subsequent periods are already elaborated. A form very characteristic of the First Semitic is a small flat cylindrical disc of carnelian, counter-sunk on both sides. A few specimens in quartzite

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\* Throughout the paragraphs on Beads, references are to Plate cxxxvii b unless otherwise stated.

came to light (see the section, fig. 2). Beads of this type were found in large numbers among the later interments in the Cimetarium. Flat discs of limestone, similar but not counter-sunk, were also found (fig. 3), as well as some spherical beads of crystal.

Besides beads of stone, enamelled porcelain beads, doubtless imported from Egypt, begin to appear even at the end of the First Semitic period, though they are not so common as is the Second. Flat circular discs, slightly convex on both faces (fig. 4), are the commonest of these; but cylinders, spheres, and oblate spheroids (figs. 5-7) are also found. Most of these are coloured green, but some few are yellow.

*Second Semitic Period*—The beads of stone (especially, as in all periods, carnelian), are common, though less so in proportion to those of porcelain than in the preceding epoch. The counter-sunk discs become rare, as do the spheres; while, on the other hand, some new forms make their appearance. Such are the drop-shaped beads (fig. 8) and the double cone (fig. 9), also found in crystal. Fig. 12 shews another form of double cone, differing in proportion. A cylinder of greenish stone (fig. 10) shews, when compared with fig. 5 already noticed, the varied proportions that the cylindrical bead can assume. With it was found the hollow cone of diorite (fig. 11), which may, however, be something other than a bead (*eg* the ferule of a staff). Small spherical beads of amethyst and carnelian were also found in this period, as well as barrel-shaped (fig. 13). In fact the manipulation of *small* stones was now much more possible to the lapidaries than in the First Semitic Period. On the other hand, large clumsy beads of limestone, of almost the size of a mace-head, were sometimes found (fig. 14 is an example). Fig. 15 is an anomalous form—a frustum of a cone with the perforation through the side. It is in a yellowish stone, in texture resembling quartz. A black slate-like stone is also sometimes used.

There is a yet greater variety of beads of enamelled porcelain and other materials than of stone. As before, the majority are green: some are blue or grey; red is also found, but is rare; a few now white have probably faded. Cyanus now begins to appear as a material for beads. As in the stone beads, the average size is less than in the First Semitic Period, though large beads are not unknown. Some beads are made of pottery, though this is not so frequent as in the later periods.

As to shape, the wide double-convex disc is found, especially in the earlier part of the period; later it gives place to spheres, spheroids, and cylinders, which become much commoner. barrel-shaped and double-conical beads also are of frequent occurrence. The cylindrical beads may be short and broad, or long and narrow (figs. 16, 17 represent extreme types). The same may be said of barrel-shaped beads.

Surface ornament by reeding, grooving, or serration begins to make its appearance in the Second Semitic Period, though not till the Third does it reach its fullest development. The fret on the cylinder in fig. 18, the oblique grooves in fig. 19, and the small knobs in a ring round fig. 20 are examples. A neat example is the green enamelled bead fig. 289, no 27.

Though the wide double-convex disc is less common in this period, the small double-conical bead, fig. 21, is of very frequent occurrence both in this and in the subsequent periods.

Less common in this period than the types already mentioned are such as fig 21*a*, a cylinder cut by side grooves to a cruciform shape; the flat oval (fig 22); the green enamel disc with serrated edges (fig. 23). The flat pendant (fig 24) is characteristic of this period. less common is the bottle-shaped spherical pendant (fig 25). This example is remarkable for having a perforation through the body as well as through the neck

Other materials are found in the Second Semitic Period. A few spherical beads

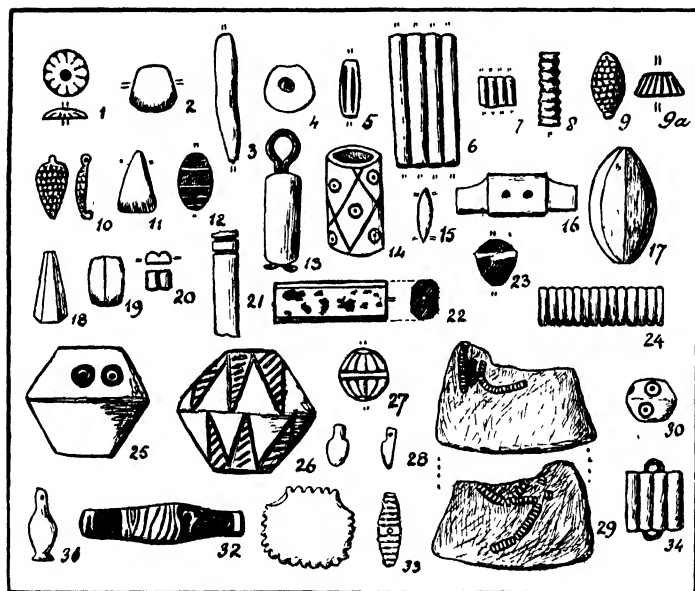


FIG 289—BEADS

of a resin-like gummy material were found. I am doubtful whether this was amber, which it resembles in appearance. A tiny sphere of red coral was found in this stratum; with it was a small sphere of gold, not perforated, but little larger than a pin-head. Flat circular discs of pearl, about  $\frac{3}{8}$ " in diameter, were found, as well as the chip of an oyster-shell, fig 26.

Beads no doubt were as a rule strung upon *threads*; but already in the Second Semitic Period fine wire of bronze or silver had begun to be used. Fig. 27 shews

two fragments of an ornament made of white [originally green?] enamelled beads strung on wire. Cylindrical beads were sometimes suspended from the thread by a wire loop, the ends of which were passed through the perforation in the bead. This lasted to the Hellenistic Period, a pottery example of that date is shewn in fig. 289, no. 13.

A form which begins to appear in the Second Semitic Period and lasts into the Fourth is a flat disc, plane on one side, with a rosette on the other, and a perforation through the middle. These beads are always of small size: they are of enamelled porcelain. It is not a very common type of bead at any time (fig. 289, no. 1).

The bone cylinder with grooves and punch-marks (fig. 289, no. 14), from IIIa 28, is probably a large bead.

Some of the ornaments to which beads were attached must have been very elaborate, though owing to the decay of the threading material nothing remains but a disconnected heap of the beads themselves. In one place was found a pile of no less than 415 small green enamelled beads. Of these, with the exception of two or three multiple beads of three parallel tubes—a form that became much more prevalent in the following period—about two-thirds were small flat circular discs perforated in the middle, and the remaining third were barrel-shaped.

*Third Semitic Period.*—The proportion of stone beads to those in various forms of composition is again less than in the preceding period.

Carnelian and agate are the commonest stones, especially the former. Amethyst, basalt, marble, and limestone are also found. As a rule the stone beads of this period are of the same moderate size as in the last.

The shapes, on the whole, are similar to the commonest shapes of the Second Semitic Period: barrel-shaped (as fig. 13), drop-shaped (as fig. 8), double conical (as fig. 12), and cylindrical (as fig. 5), are frequent. Agate beads are most commonly barrel-shaped. Other shapes not found in the preceding periods are the cube with chamfered angles (fig. 28), the bead (fig. 29) of agate, a flat oval in section and with a slight C curve, and the pendant (fig. 30), which is plano-convex in vertical section—the plane surface being turned toward the person of the wearer. Fig. 31 is one of the simplest kinds of beads, being simply an ordinary flat waterworn pebble, perforated. Fig. 32 is an oblong bead with one convex and three plane sides.

In this period celt-shaped pendant beads come into use. These are probably *amulets*. They are made of carnelian, less commonly of crystal: one specimen was found in jade. The type, always rather rare, lasts down to the Hellenistic Period: fig. 289, no. 11, is a specimen in carnelian from the Hellenistic stratum. The bottle-shaped pendant (fig. 289, no. 31) found in carnelian and in jasper, is one of the commonest forms of bead of this period.

A handsome form of bead found in this period in agate and in jasper is shewn in fig. 289, no. 17. It is oval in outline, but instead of being rounded is ground so as to have eight facets, as the drawing shews. This form of bead is uncommon.

Fig. 289, no. 22, represents a beautiful bead of variegated black and white marble. It is a long square bar with the edges chamfered off.



The porcelain and other composition beads of the Third Semitic Period are likewise as a rule of small size—indeed some of the smallest beads found, little exceeding a large-sized pin-head, belong to this period. Spherical, spheroidal, cylindrical, and barrel-shaped beads are found, and the flat double-convex discs (like fig 4), especially characteristic of the end of the First Semitic Period, now reappear. One hoard contained no less than sixty-five beads of this type, in green enamelled porcelain. The minute beads are small flat discs, or else cylindrical, or more or less spherical in form, and of a variety of colours—red, blue, green, and yellow. A collection of fifty-one such beads was found in one place, adhering to the side of a trench. They were so small that they had escaped the notice of the workman while digging, so probably a number had been cleared away. What remained, however, showed that they had been strung when first deposited, and probably they formed part of some such ornamental object as an elaborate pectoral, decorated with beads of various colours. The beads, as they lay, were definitely grouped in colours (red, yellow, blue, white), and not mixed together. Some fragments of a network (?) of minute purple beads were found, fastened by corrosion to a fragment of bronze that lay in the slop-land above the mouth of the Water-passage (fig. 289, no. 29).

The rest of the enamelled beads are for the greater part green.

A new material now begins to make its appearance. This is glass, in which a considerable number of beads (of Egyptian origin) of this period were found. The hoard, presently to be described, represented in Plate *cxvii a*, is a good collection of representative types. The glass is of a light grey or dirty white colour, flecked with darker spots, and often with flamboyant markings on the surface. There is very little cohesion between the particles of the glass, and unless carefully handled these beads are apt to crumble to dust—especially if wet.

In many glass beads an ingenious method of varying the surface colouring is to be found. Hollows are scooped in the side of the bead, and filled with glass of a different colour, thus producing dots of that tint on the background colour of the bead. Sometimes the process is continued: a number of little cups of different colours, one inside the other, fill the hollow (as shown in section in fig. 33*a*), the effect of which is of course a series of concentric circles of the same colours (fig 33*b*). Sometimes, instead of a cup, a groove is cut round the body of the bead and filled with a different colour, thereby producing the effect of a band instead of a dot. Specimens of beads thus decorated are shewn in figs. 34–40. Note especially the quatrefoil decoration of fig 37, in which the horizontal leaves evidently do double duty. In fig. 38 the dots are of small size, and on a cylinder, which is less common than on a sphere or spheroid. In fig. 40 the incised lines are wavy.

The manner of decoration to which allusion has already been made—grooves on the surface of the bead—becomes fully developed in this period and leads to further elaboration. Figs. 41–44 are specimens of beads thus ornamented. Another is fig 289, no. 8. By various disposals of the grooves, multiple beads are developed, the members of which may either be lengthways or side by side—in the one, a long cylindrical bead is divided by ribbing so as to resemble a number of small beads strung on one string—in the other, a series of tubes are made side by side, some or all of which are perforated for separate strings. Figs. 45–48 are specimens of such multiple beads.

The type, fig. 48, which is purely Egyptian, begins to appear in the Second Semitic Period. Usually there are only two tubes in multiple beads, the other readings being solid: but fig. 289, no. 6, is an example in cyanus, and no. 7 in red enamelled porcelain, where all four readings are perforated.

Fig. 289, no. 34, contains a looped bronze wire which is instructive as showing how these multiple beads were sometimes strung.

Cyanus beads are commonest in this period. They are nearly all very small—some excessively so—although one cylindrical bead was found in this material of the exceptional size of 2" length and  $\frac{1}{2}$ " diameter. The others are all spherical, barrel-shaped, or cylindrical (some of the last-named multiple).

Some beads of exceptional shape belong to this period. Such are the square cylindrical bead fig. 49; one or two resembling a cow's head (as Pl. cxxviii, fig. 38); the triangular bead (in greenish glass) with two concentric circular grooves on each knob, fig. 50; the pendant, plano-convex, with a small loop on the plane side (fig. 51)—a not uncommon type; and the amethyst cut to resemble a shell (fig. 52). A variety of fig. 51 is often found in which the surface is covered with little knobs, in imitation of a pine-cone. See fig. 289, nos. 9, 10. Fig. 53, a bead made by twisting a "wire" of glass into a spiral, is quite unusual at this early period.

Other materials from which beads are made in the Third Semitic Period are bone, shell, and plain drab pottery—of the last material beads are made of larger size than is usual in this period. Fig. 54 is a typical example: in one place a group of five such beads were found together. A small circular flake of the pearly inner surface of an anodonta shell may be mentioned: it had a perforation, not truly in the centre of the disc (fig. 289, no. 4). With it was fig. 289, no. 5, a long cylindrical narrow bead of glass with five longitudinal depressions in the sides. The irregularly made cylinder of green enamelled porcelain (fig. 289, no. 3) also belongs to this period. Cowrie shells, with the back ground away, are a cheap and common form of bead. Fig. 289, nos. 15, 16 are two beads both Egyptian in origin. No. 15 is oval, with two perforations running across the ends: it is of ebony, a rare material for beads at Gezer. No. 16 is of glass: the base of this bead is flat, the back rounded, there are two perforations through the side. In IV 19 a fragment of what must have been a handsome and costly ornament was discovered. This was a chain of small beads of gold, strung together with carnelian beads at intervals, and one larger bead of gold—all spherical.

Among exceptional forms may be noted fig. 289, no. 18, a conical six-sided bead of enamelled porcelain. This was a rare form also no. 21, which is unfortunately broken at both ends. It is of the same material: cylindrical, with two grooves surrounding it, probably at what was originally the middle. Here may be mentioned also a form of bead in shape an oblate spheroid, with the surfaces at each end of the perforation flattened, but not in parallel planes—as fig. 289, no. 2. This may be careless workmanship in some cases, but more probably it is intended to make the bead hang better in a pendent chain—like the *voussoir* of an inverted arch.

An important collection of beads and cylinders of this period was found in IV 13 C. The principal constituents of the hoard are shown in Plate cxxxvii a.

The beads were in a pile, not confined in any vessel (possibly they had been

in a wooden box which had rotted away), and were mingled with the soil. They lay on each side of a wall, which had evidently been built afterwards it is curious that the wall-builders overlooked them

The majority of objects in the hoard are beads of the friable grey glass paste characteristic of the period of Amenhotep III. Comparatively few were of stone no 10 was of a bluish-green stone resembling basalt, 22 and 34 light-coloured carnelian, 26 a deep-red carnelian, and 31 an agate. The rest of the beads were of the glass paste referred to. Fig 1 is brownish grey with a white line in a spiral surrounding it it is an oblate spheroid. The white line was probably originally bluish green. The hoard also contained a duplicate of this bead. Fig 2 is a prolate spheroid of bluish grey, with darker coloured flecking all over it. Fig 3 resembles fig. 1 in colour and in having a spiral white line, but is barrel-shaped, not spheroidal. Fig 4 is cylindrical, of greenish-grey paste, with a network of black lines over its surface. Fig. 5 represents two of the very common small green enamelled paste perforated disc beads. Fig. 6 is a spherical bead, of grey-flecked paste, with a brown line round the circumference. Fig 7 is similar, an oblate brownish-grey spheroid, but the line round the circumference is in this case a belt, applied afterwards to the surface and so projecting above it. It is of paste, pure white. A duplicate of this bead was found in the hoard. Fig. 8 is an oblate spheroid with vertical grooves. It has been enamelled a rich dark bluish green, and one half of the enamel retains the colour, the other half has faded white. Fig. 9 is a cylinder, now white, it has been greenish blue. Fig 10 is as above mentioned, a square disc of a compact blue-green stone resembling basalt. Fig 11 is a similar disc, but of white (once blue-green) paste. It is broken, probably half, containing another perforation, has gone. Fig 12 is a much-disintegrated bead of blue-green paste. It is cylindrical. Another, similar and in a similar state, was found, this was slightly shorter. Fig 13 is an interesting bead of greenish-blue glass, with threads of opaque white lines through it. The tips are orange in colour. It is a flat bead, expanding in the middle as shewn in the figure. Another, rather more irregular in shape but otherwise identical, was found. Fig 14 is a beautiful deep blue, ornamented with wavy lines in orange colour. This bead was broken in two. Fig. 16 is of similar character, and there were two others much broken and disintegrated, which are not drawn. Figs 15, 17 are flecked grey paste, with similar wavy lines in white upon them. Fig 18 resembles fig 1, but instead of the spiral line there is a broad white zigzag surrounding it. Fragments of a duplicate of this were found. Fig. 19 is of transparent green glass, it is one of two, the other being slightly larger. Fig 20 resembles in shape fig 2; it is grey and has white horizontal lines surrounding one half of it, as shewn. Fig 21 resembles in material fig 4—greenish-grey paste with a network of black lines. Fig 22, the light carnelian bead, has a broad counter-sunk hole through it, as shewn by the dotted lines. Fig 23 is flecked grey, resembling fig. 1, but without the spiral lines. Fig. 24 is a cylinder of paste enamelled green. Fig 25 is a handsome bead of which only a fragment was found, it is of the same grey paste as most of the others, but is crossed by a broad green band on which are orange dots. Fig 26 is a bluish-grey bead of paste (not flecked). Fig 27 is a cylinder of deep-blue glass. Fig 28 is the usual grey colour, with black lines on

the surface, and a yellow spot round the hole on one side. Fig 29, the deep red carnelian bead, was found a little distance from the rest of the hoard, but no doubt belongs to it. Figs. 30, 31 are two small spherical beads; the first of these is the same green with black lines which we have seen in figs 4, 21; the second is, as already mentioned, of agate. Fig 32 is a cylinder resembling the spherical bead fig 1 in material. Fig 33 is of grey with black lines. Fig. 34 is carnelian. Fig 35 is a paste cylinder of a light yellow colour. Fig. 36 is a paste bead of "voussoir" shape. Fig 37 is unhappily a fragment only. It was a very handsome cylindrical bead with red and white dots ornamenting it, the ground colour is grey. Fig 38, of which four aspects are shewn in the Plate, is a curious bead in the shape of a cow's head. It is of flecked grey paste, the horns being represented by a piece separately applied. The eyes (one of which is missing) were little buttons of dark Indian red stuck on in place.

Besides the beads illustrated there were five small spherical beads resembling figs 30, 31, of bluish-grey paste, not here illustrated, and a number of fragments of other types similar to the commonest here drawn.

The button, fig 39, with cyma-shaped sides is of diorite. Fig 40 is one of five buttons of ivory; the others were similar in shape but of smaller size. Fig 41 is a curved splinter of shell, perforated as shewn.

The hoard also contained two bronze objects—the pin with round shank and square head, fig 42, and the loop, possibly for the suspension of a large bead, fig 43.

There were also no less than seven seal-cylinders; unhappily in a damaged condition. I have done my best at representing them in figs. 44-50, a description of them is given later, with the other cylinders found in Gezer.

Fig. 51 is a curious object. It is of green glass, and appears to have been adapted as a bead from a seal that had been accidentally broken. The perforation at the lower end is not where the perforation is usually found in a seal. The flat side, which I suppose to have been fractured, is ground smooth. A small triangular object (? a wing) remains of the device on the base of the seal. There has been a simple ornament round the edge of the vertical sides.

Fig 52 represents three small fragments of gold leaf, fluted and curved, which evidently decorated some cylindrical object.

The hoard also contained a fragment of bitumen. This must have been an accidental intrusion; a good many such fragments were found here and there in the excavation.

*Fourth Semitic Period*—The proportion of stone beads to those of other materials remains much as in the previous period. Carnelian is still the commonest stone, but jasper, limestone, crystal, agate, and amethyst are also found. A minute irregular pebble of jade, about  $\frac{3}{8}$ " in diameter, perforated, was found in V 28.

The minute beads, so much affected in the Third Semitic Period, do not seem to have been so popular in the Fourth, though they are not unknown. On the other hand, large beads are on the whole rarer. There is much greater monotony in the shapes and ornamental treatment: the artistic decline so evident in the pottery of this period affects the beads also. The double cone, cylinder, barrel, sphere, spheroid, and flat disc are the commonest. Plate cxxxvii b, fig 55, in limestone, is

a cylinder of unusual proportion. The shape of fig 56, which has been made by perforating a nodule of pyrites, has evidently been dictated by the shape of the original nodule. Fig. 57 is a flat oval disc of amethyst, perforated longitudinally: fig. 58 is a small cylinder of limestone, ornamented with an incised fret.

The other materials found are green or grey enamelled porcelain, glass, and cyanus. The two last are much less common than in the Third Semitic Period: and beads derived from natural products (such as shell) are also much rarer than before. Fig 289, no 23, is of black glass, with a white belt surrounding it. The same shapes as in stone beads are found most commonly, and exceptional forms are rare. Grooved ornament on the surface, and multiple beads, are found as in the Third Semitic Period, but does not seem so common. A fine example, however, is fig 289, no. 24, which is green enamelled. Fig 59 is a good example of a grooved bead in cyanus. The collar round the end of the perforation seems characteristic of this period: compare fig. 60, which is an exaggerated specimen. Sometimes it is emphasized by being enamelled in a different colour from the body of the bead. The pendants figs 61-63, in enamelled porcelain, are worth passing notice, as is the multiple bead with perforation transverse to the flutings, fig 64.

Specially characteristic of this period are large massive beads of pottery,\* a few are cylindrical (fig. 65), still fewer double ogee (fig. 66) the majority are double conical, and ornamented with various combinations of incised lines and dots (figs 67-69). The last-mentioned form is Cypriote, and these beads (or spindle-whorls) are most likely direct importations (see *CCM*, Pl III, no 702). One example was found, without ornament, in a compact dark-green stone resembling marble in texture. Analogous was a large *single* cone of pottery, without ornament, found in V 29. Two rather early specimens are shewn in fig 289, nos. 25, 26. the first is peculiar for having two, and only two, punch-marks† close together on one side. These two specimens, to judge from the associated antiquities, are of the Third Semitic Period.

Mention may also be made of a flat circular disc with chamfered edges covered with ribbing—porcelain, with a grey glaze on it (fig 289, no. 9a).

Fig 289, no 12, is in green glass with white transverse lines. The shape is a flat oval. Fig. 289, no. 20, is a small bead covered with blue glaze, plane on one side, duplex on the other, but with the perforation at right angles to the reeding, which is the less usual form.

*The Hellenistic Period* is poor in beads. On the whole the proportion between stone and composition beads seems less discrepant, but handsome stones are comparatively few in number, and the shapes present nothing of special interest. The most striking feature of this period is the beginning of the later glass industry, which developed to such an extent in the succeeding centuries. Some handsome glass beads were found in the Hellenistic debris. Mention may be made of one found in the earth filling the great central reservoir. It is large and spherical, of

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\* These may be spindle-whorls.

† Two rows of similar punch-marks occur on the Fourth Semitic bead fig. 289, no 30, which is made of a hard compact bluish-black paste.

opaque dark-blue glass, ornamented with three white lines—one at the ends, one in the middle—with a row of yellow dots between each pair.

The stones found in use are carnelian (in greatly diminished proportion), jasper, limestone, and marble. Cylindrical, spherical, spheroidal, long double conical, and small flat double conical (like figs. 12, 21 respectively) are the chief shapes; some pendants, like fig. 70, were likewise found.

Enamelled beads are now rare, and what there are probably belong in reality to the upper débris of the stratum next below. The Egyptian element, in fact, practically disappears. A grey or reddish glaze, coarser in texture and of a more "shiny" surface than the Egyptian enamel, now coats the surface of small porcelain beads. Fig. 289, no. 33, is a green enamelled bead from this stratum, though possibly it belongs to the previous period. It is flat, oval, with convex sides, the edges are serrated all round. The two corners at one side are broken. Some elaborate polychrome effects are obtained in enamel, as in fig. 71, which is of a blue colour, and is covered with a *semée* of white, red, and yellow dots. The small pendent bead with a flat back, fig. 289, No. 28, is reminiscent of an earlier type. It is covered with a red glaze.

The glass beads are either of the ordinary shapes—especially cylindrical or spheroidal—or else of some special form. In the first they are generally monochrome, especially yellow and blue; though sometimes colours are combined, as when a belt of yellow encircles the thickest part of a barrel-shaped black bead. Fig. 72 illustrates this, showing in addition to the yellow band a row of white knobs encircling each end of the perforation—six knobs at one end, seven at the other. The triangular bead fig. 73 illustrates the unusual shapes, in which there is generally a decorative colour treatment enhancing the peculiarity of form. Fig. 289, no. 32, is a very handsome bead of black glass adorned with white lines.

Fig. 74 is a flat, square bead of ivory, with two perforations through the sides, and decorated on the broad face with punch-marks.

Some clay beads were found, but not nearly so many as in the preceding period. These were cylindrical, with rounded ends, like fig. 54. There were also a few minute flat circular splinters of flint, about  $\frac{3}{8}$ " in diameter, perforated in the middle.

An unusual variety of barrel-shaped beads, with four sides (of glass), from this stratum is shown in fig. 289, no. 19.

In the *Roman* tombs no beads were found. The *Byzantine* tombs, however, contained a great number and variety, many of them very beautiful. There were some of stone, but these were in the minority, and of the most ordinary shapes, on the other hand, beads of glass, and of paste covered with enamels of various colours, were very numerous. It is necessary only to refer to the plates and descriptions of Byzantine tomb deposits which will be found in Vol. I; a sufficient number of types are there illustrated.

Especially in the Third Semitic Period it was fashionable to wear several strings of beads on the breast (compare the Ashtoreth plaque figured, *post*, fig. 414). These were suspended from perforated plates of

bone or stone, with one perforation for each string. Specimens are shown in fig. 290. The first two, which are perforated for the quite unusual number of eleven and ten chains of beads respectively, are of bone. They are also rather early examples, being found in the neighbourhood of the palace with two pillars in **II 27**. The third specimen was from **IIla 28**; it is also in bone, and is perforated for eight strings. The fourth, from **IV 30**, is for the more moderate number of four strings, but is the only specimen found at Gezer in jasper. The fifth is a rather later specimen; it comes from **V 29**, and is of diorite.

Sometimes proof was found of the estimation in which beads of fine stone were held. Thus, a large diorite bead, cylindrical,  $\frac{1}{2}$ " long, was discovered in **VI 20**, which

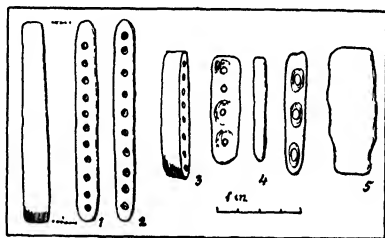


FIG 290—SUPPORTS FOR CHAINS OF BEADS

had somehow split along the perforation, so that it was useless for its original purpose. Some secondary use must, however, have been found for it (possibly as a weight), as the fractured surface was carefully polished.

The drilling of the hole was the last stage in the manufacture of a bead of stone. This was usually done from both ends; sometimes the meeting is not exact, so that there is a shelf or pocket in the middle of the channel that makes threading rather difficult. Occasionally a bead was to be found completely finished in all respects but the perforation. Thus a sphere of limestone,  $1\frac{3}{8}$ " in diameter, flattened at the ends of the axis, and ornamented with vertical channellings down the sides, was found in the cast rubbish between the city walls north of the high place. This was probably a limestone bead that had never been perforated.

Some bronze ornaments of a more miscellaneous character may here be mentioned. The peculiar small trefoil ornament (Pl. cxxiv, fig. 44) was

found in the much-disturbed débris at the N. end of trench I. It measures 1" by  $\frac{1\frac{1}{8}}{8}$ " and  $\frac{3}{8}$ " thick. It probably belongs to the Third Semitic Period.

The small bells (Pl. cxxxv, figs. 16, 17) may have been horse bells (cf. *Zech.* xiv 20), but it would seem from the frequency with which bells are found in the later tombs, that they were worn as personal adornments or charms (cf. the bells in the fringe of the robe of the High Priest). This fashion must have come in in the latter half of the Fourth Semitic Period, to which the smaller of the two bells belongs. The other, which is of the Hellenistic Period, has an iron clapper. Some other bronze ornaments and fragments, from the Hellenistic stratum, will be found in Plate cxxxv, figs. 13 a, 14 a, b, 18—23, 40 a, 48 a—c. The illustrations speak for themselves. The candelabra head (?) fig. 21, and the pin with two horizontal loops, fig. 22, are the most noteworthy.

At the north end of vi 4 was found a fragment of a small silver plate, the surviving portion being  $\frac{3}{4}$ " long; apparently it had been oval, with triangular projections like the ears so common at the ends of panels containing Roman inscriptions. One end of the object with one of the ears remained.

### (c) Toilet and Cosmetics

1. *Tweezers* are found from the beginning of the Bronze Period, though on the whole they are commonest in the later strata. In no stratum, however, can they be said to be very common. They were probably used for removing superfluous hairs, as well as for extracting thorns from the flesh. There are two chief types—in the first the tweezer is bent with a continuous curve like a U. In the other there is an inward cusp in each arm thus— $\} \}$ , to secure a greater elasticity in the spring. The first type is the rarest; indeed the three specimens figured (Pl. cxxxv, figs. 2-4) and the fragment, fig. 11, were the only ones noted at Gezer. There is no special chronological distinction between the types, for fig. 2 was found associated with Second Semitic pottery, whereas fig. 3 was found in the top stratum. Of the second type there are several varieties which likewise cannot be arranged chronologically. In some there is no shoulder under the spring, the limbs are either straight or nearly so (as in Pl. cxxxv, fig. 5), or else shaped like a pair of parentheses (fig. 6). In another variety there are slight shoulders, the limbs approximating in a straight line to the top, as in figs. 1, 7, 8; while in another the shoulders are very prominent, as in figs. 9, 10. The extravagant prominence of the shoulders in fig. 10 is, however, unusual. Another unusual example is fig. 12 [V 19].



2. *Spatulae*.—Spatulae (tools used for lifting small quantities of cosmetic, principally *kohl*) are rare in the lower strata, uncommon in the middle strata, and come into common use in the uppermost stratum only. One of the oldest specimens found was the head of a spatula in III 2.

They are almost always long cylindrical shafts, having at the lower end flat expansions. Hollowed spoon ends have not been found in the trenches

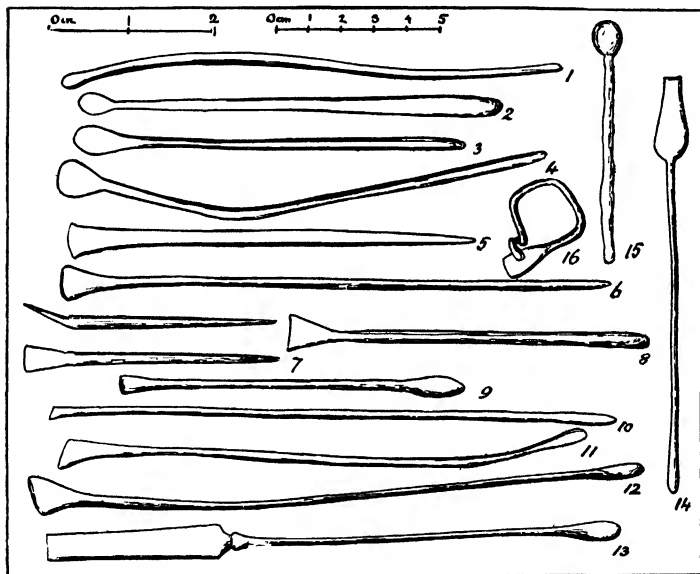


FIG 291—SPATULAE

at Gezer, though one such example was found at Tell eš-Šâfi (*EP*, Pl. 79, no 51). In Pl. cxxxiii, fig. 41 is what may be an ornamental spatula. It has a very slight spoon-like depression, below which is an ornament of spirals and S curves, as shewn, in slight relief on the reverse side. This object was brought me by a workman who assured me he had picked it up on the mound. In the normal form, the expansion is of various shapes, as a glance at the

representations (fig. 291) will shew. The first four have oval expansions of various degrees of width—in the first hardly projecting beyond the shaft, in the fourth of considerable width. In the next five the blades are triangular; the blade of no. 7 is set at an angle to the shaft, which is not common. Then follows a comparatively rare group in which the blades are triangular with



FIG. 292 — KOHL PENCIL

edge cut obliquely. Nos. 13, 14 are representations of the latest type, which hardly appears at all in the trenches, though specimens are found in the tombs, in which the blade is folded longitudinally. There is also some variety observable about the butt end of the shaft. Usually it is of the same thickness as the shaft (or tapers slightly) and ends with a rounded point. The expansion into a club end is also not uncommon, and will be seen illustrated in nos. 9–13. On the other hand, the termination in a sharp point (as no. 5) is quite rare. Both these specimens are earlier than the rest, no. 5 being

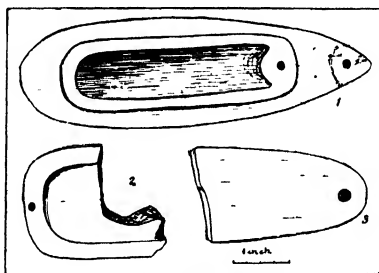


FIG 293 — PERFUME BOXES

associated with late Second Semitic objects, and no. 7 being from V 4. The others are all from the Hellenistic stratum.

Spatulae of iron are occasionally found, but they are very rare. The example shewn (no. 15) is from V 8.

The remarkably contorted bronze specimen, no. 16, was found in V II.

3. *Kohl Pencils*.—As such are probably to be explained straight bars of lead, cylindrical and rounded at both ends, about 6" long, found in the later Semitic strata. An example is figured here (fig. 292), which is unusually thick, and also remarkable for its taper. This came from VI 26.

4. *Perfume Boxes*.—These are in ivory, in the shape of a model of a boat. A good specimen (fig. 293, no. 1) was found in IV 13; it is  $6\frac{1}{2}$ " long. A similar object was found at Tell es-Sâfi (see *EP*, pl. 77, fig. 10) which was covered with a lid, pivoting on the hole at the end of the depression, and perforated. There is also a similar hole in the under side of the box to allow the boat to stand on a pedestal with a tenon for securing it. A fragment of another, with depression  $2\frac{3}{4}$ " deep, from the Hellenistic stratum, and a piece of the cover of a third, from waste earth, are also shewn in fig. 293. The ivory object fig. 294 [II 8], is probably the foot of a smaller

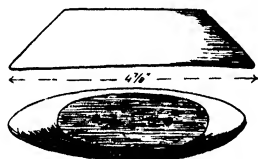


FIG 294—FOOT OF A PERFUME BOX

object. Another variety is described later, in the section on Egyptian objects.

5. *Combs*, which are made of bone or ivory, ornamented with simple linear or curved patterns at the sides, are rare. The oldest found was in the early Fourth Semitic tomb no. 59 (Pl. lxxxiv, fig. 24). The teeth are as a rule coarse, though fig. 295, no. 1 (which is restored from a number of small fragments) had sixteen teeth to the inch. This specimen bears similar decoration on both sides. There is a perforation through it. No. 3 is of ebony.

6. *Scrapers*.—An important toilet article of the two latest periods, to judge from the frequency with which they were discovered, was a scraper of porous volcanic stone. This was in the form of a disc, rectangular or oval, with a vertical ridge running across it, which served as a handle; the latter was frequently perforated for suspension. This kind of stone is still used in the baths for rubbing away callus skin from the feet or elsewhere. It may be

compared in its use to the strigil of the classical athletes. The modern examples, however, are set in metal. The illustration in fig. 296 shows a representative specimen  $3\frac{1}{4}$ " in length. They are found oval, triangular (rare), or square, and the handle is as shewn in the figure, or else rectangular and upright. The examples are generally perforated as shewn. The groove

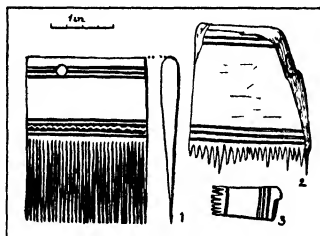


FIG 295—COMBS

round the base of the handle in the example figured is an uncommon feature. Beside these "handled" specimens, oval discs (without the handle) of about the size and shape, though rather smaller and less convex, of a piece of toilet soap are also common. These also are sometimes perforated for suspension.

Though they are not unknown as far back as the Second Semitic Period,

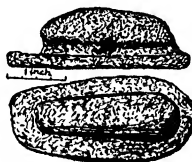
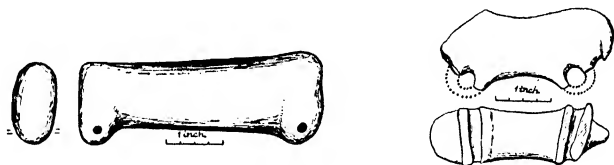


FIG. 296—STONE SCRAPER

these objects are commonest by far in the Hellenistic stratum: hardly a pit was dug without finding one or two in that level.

Before leaving the subject of Dress it may be as well to notice a class of object found throughout all the Semitic stratum, a typical example of which is shewn in fig. 297. They consist of bars of pottery, about 4"-6" in

length, with the ends bent at right angles and perforated. When these ends are broken off, as is often the case, they look like the heads of rude animal figures, from which, however, they can be distinguished by the perforation (what in this case represents the eyes) going right through from side to side. In a few there is no right-angle bend, the bar being simply a cylinder perforated at the ends. These objects seem to be the handles of leather hand-bags, suspended by strings from the holes. Sometimes an actual animal



FIGS. 297 AND 298.—BAG-HANDLES

shape was given to them, as in the fragment,  $3\frac{1}{4}$ " long, from IV 4, which is shewn in fig. 298.

Another class of pottery object may conveniently be referred to here. This is the brush-handle, such as is represented in fig. 299. These were fairly common, especially in the Fourth Semitic Period. The photograph shews the form these objects always had: a disc about 3" in diameter, with a number of close-set holes on one side, for receiving the bristles; and on the other with a conical projection, which probably fitted into the end of a stout wooden handle.

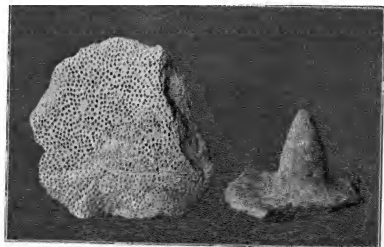


FIG 299.—BRUSH-HANDLES

## CHAPTER VII

### DAILY LIFE · II WORK AND PLAY

THE present chapter is divided into three parts : the first dealing with the different trades practised in the city, so far as it is possible to reconstruct these from the remains ; the second with the instruments of trade, *i.e.* the weights, seals, and coins ; and the third with the games for which any of the apparatus has survived.

With regard to the first, it should not be forgotten that owing to the extreme rarity of written documents, and to the perishable nature of most of the materials, even an approximately complete view of the various occupations of the townspeople is not to be obtained from the remains they have left behind. We cannot doubt that there were government officials, lawyers, makers of and dealers in textile fabrics, food-stuffs, and other perishable goods, shoemakers, butchers, and the like ; but scarcely, if at all, can any abiding mark of their labours be detected. We can here speak only of those of whose callings there are surviving relics—whether these be the tools that they used or the articles which they manufactured.

#### § 29.—THE FLINT-KNAPPER

Our study of the trades, arts, and crafts of the ancient people of Gezer will naturally begin with the oldest—the art of the worker in flint.

It has been already said, in the opening chapter, that, though there is plenty of evidence for Palaeolithic man in the neighbourhood of the city, no sign was found that Palaeolithic man had established himself permanently on the hill on which Gezer was afterwards built. Specimens of Palaeolithic implements from the neighbourhood, picked up in the fields between Abû Shûsheh and Ramleh, have already been illustrated in Vol. I, fig. 3 (p. 7). From the Neolithic Period onwards, however, the mound was continuously occupied. Very fine specimens of the flint-worker's art were found in the Troglodyte caves. As we shall see presently, the art was not killed in Palestine, any more than elsewhere, by the introduction of metal, though a

distinct deterioration is immediately noticeable in the skill displayed in manipulating the more ancient material, increasing more and more till the end of the Fourth Semitic Period, when the art finally dies out in a few shapeless chips. A few cases may be noticed of the reaction of bronze implements on the outlines of those of flint.

Probably in the Neolithic Period each man made his own tools for himself. In the Semitic Periods, however, flint-working became a trade practised by certain individuals, whose factories were easily to be identified by the heaps of waste chips lying in their neighbourhood. Thus, on the rock at the north end of trench 2 an enormous quantity of waste chips of flint was found. Another manufactory was in IV 21, just north of the granary, and there were at least a dozen found elsewhere, at different levels. No finished specimens were found in any of these heaps: typical examples of the component chips will be found in Pl. cxxxix, figs. 8-13.

There is no special peculiarity to be noticed in the treatment of flint by the Palestinian workers. The tools were, for the greater part, flakes, either long and narrow, or short and broad, as was required, the edge being denticulated by more or less delicate chipping.

The following is a description of the various types of flint implements found in the excavations:

1. *Ribbon-knives*.—About 19 per cent of all the flints found are long, straight knives, the base usually cut square (removing the bulb of percussion) and the tip also cut square, or, more frequently, pointed. The edges are usually parallel, but sometimes taper to a point. The inner side—*i.e.* that which was towards the core from which the knife was struck—is smooth and even, except at the bulb of percussion (when this is not removed) and the subsidiary wavelets in its neighbourhood. The outer side has two or three facets (two in about 30 per cent), parallel with the axis of the knife, meeting in a more or less straight ridge parallel with the edges. In the best-made examples the edges are struck off clean; some specimens were found with which it was possible to pare a pencil. In others the edges are serrated with delicate chipping.

In the normal form of knives with two facets the ridge is in the middle of the face (as in Pl. cxxxviii,\* fig. 4). Occasionally the ridge broadens in its course for a greater or less distance (fig. 3), and not infrequently it

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\* Reference is to Plate cxxxviii throughout this section unless otherwise stated.

bifurcates at the base, thus giving the knife a chisel-shaped end. In fig. 4 the edges are plain: chipped edges will be seen in figs. 5, 6. In a less frequent variety the ridge is nearer one side than the other, so that the narrow facet ultimately becomes a back to the knife (see figs. 7, 8). In some examples, such as figs. 9-12, the edge bifurcates so high up as virtually to create a type intermediate between the two- and three-facet knives: fig. 9 is an unusually fine specimen, in which the ridge bifurcates *upwards*. In fig. 10, which is one of a group of well-made flints from cave 3 III, it bifurcates *downward*. This last specimen also illustrates another feature of some of the flints—a concavity of the inner surface, giving the knife a tendency towards a C-shape, sometimes affecting the tip only and sometimes the whole knife. This, of course, is due to the shape of the original core. Fig. 11 shews the ridge bifurcating in both directions; here only one edge is chipped. In fig. 12 both edges are chipped.

Three-facet knives can be classified on the same general lines: plain edges (figs. 13, 14—the latter, a particularly graceful specimen, in a reddish semi-transparent stone, is from the hoard of flints in cave 3 III, just mentioned), one edge chipped (fig. 15), and both edges chipped (figs 16, 17). In the first of these latter the central facet is narrow and plain; in the second it is broad and concave.

The length of ribbon-knives varies considerably. Fig 9 is among the largest found in Gezer (length  $8\frac{1}{4}$ " ), but knives so long as this are uncommon, and found only in the earlier periods. They diminish in length as well as in technical excellence as we advance to the later periods, in the Fourth Semitic Period such knives become very rare altogether. The average length is about 4", or, perhaps, a little less.

The smaller knives, like the teeth of flint sickles, already described (*ante*, p 32) were set longitudinally in hafts from which they projected after the fashion of the teeth of a comb. The contrast between the dull surface of the part of the flint protected by the haft, and the bright surface polished by rubbing, is very marked. In a three-facet serrated knife found in IV 4 there was a polished line on both edges: apparently the knife, after being some time in use, had been removed from the haft, reversed and then replaced. They were secured in the haft by some resinous material, traces of which occasionally remain on the surface of the knife. The longer knives were apparently used without a haft, or, perhaps, thrust lengthways in a handle like an ordinary modern knife.



There are several varieties of chipping—coarse, as in fig. 12, and fine and regular, of which fig. 20 is a good example, and fig. 33, from I 29, a most remarkably fine specimen. All possible gradations between these extremes could be illustrated from Gezer—the finer specimens being, as usual, from the lower strata. Secondary chipping, *i.e.* re-chipping of old specimens, may possibly have been practised sometimes, but no certain instance was noted. Partial serration as in fig. 27, from the Third Semitic Period, is much rarer than complete serration or total absence of serration.

The ridges separating the facets are not always straight, but sometimes curve one way or another. The edges also are often convex or concave. Sometimes—but very exceptionally—both edges are either convex or concave; usually when one edge is convex the other is concave, the whole knife having a lateral bend.

Some knives of this kind are provided with tangs (as in fig. 1). This is an instance of what was alluded to just now, namely the reaction of bronze upon flint forms.

2. *Saws*.—Chipped ribbon-knives naturally pass into saws, when the denticulations are prominent and regular. The line of demarcation is not very definite: figs. 20, 33 might almost be described as finely toothed saws, as also Pl. cxxxiv, fig. 17, from the larger of the two caves under the High Place. But it would perhaps be better to restrict the name *saw* to flints with conspicuous teeth, carefully isolated; such as fig. 18 from the Third Semitic Period, and 19 from Va 26. In one of these the teeth are on both edges, in the other in one only. A neat specimen, though with rather irregular teeth, from III 12, is shewn in Pl. cxxxix 14. Saws are always of small size; they are distinctly rare.

3. *Pointed Knives*.—These form about 22 per cent of all the flints found. They are similar to the straight ribbon-knives, differing from them in the disposition of the edges, which, instead of being parallel, approximate towards the tip. They fall into divisions analogous to those of straight knives. Fig. 31 is a good example: it has a chipped edge. Another fairly good example is fig. 3, which is noteworthy as being from the Hellenistic stratum, near the Syrian Baths, N. of the Maccabean Castle. Flints of any kind are extremely rare in this stratum, and a well-made flint all but unknown; this example was probably brought up from a lower stratum, in excavating for a cistern, or for some other purpose.

4. *Sickle Flints* have already been described and illustrated in Chapter VI (see page 32, and Pl. cxxviii, fig. 9). The point-teeth of sickle-flints can be distinguished from the pointed knives just described, by their having only one cutting edge, which almost always is slightly concave, and is invariably serrated. The back edge is usually quite thick. Pl. cxxxix,

fig. 2, which represents a specimen found on the rock, is an intermediate form; it resembles a sickle-point in having but one cutting edge, but differs from the normal type in being straight, and having very slight serration on the edge. Sickle flints are always trimmed so as to ensure that the cutting edge of the implement shall be towards the left hand of the person using it, when the teeth are turned with their inner or smooth surfaces downwards.

5. *Spear- and Arrow-heads*.—In these the base is thick (the bulb of percussion being utilized to give it thickness) and the edges approximate to a sharp point. The taper is either regular, as in fig. 21, or more or less crooked, as in fig. 22. Some (as fig 23) are broken from longer chips and in consequence do not show the bulb of percussion. Arrow-heads are similar, differing only in size (figs. 24, 25, 26). A fine tanged spear or arrow-head (fig 37), with neatly chipped tang and edges, was found in a cistern. The lozenge-shaped arrow-head (fig. 38) came from **V 15**, and fig. 39 from **IV 27**; the leaf-shaped arrow-head, Pl. cxxxix 19 came from **V 29**. The barbed tangless spear-head fig. 36, which is a fine specimen of delicate tooling, came from the rock. A barbed arrow-head was found in **V 4** in a context earlier than any barbed *bronze* arrow-head found in the City, it is shewn in Pl. cxxxix, fig. 18. Another tanged spear-head, from **III 30**, is shewn in Pl. cxxxix 3.

6. *Borers*.—These are triangular or lozenge-shaped in section: they are not very common. Fig. 2, from **II 18**, is a good example, as in the rough pointed flake Pl. cxxxix 20, from **III 6**. Special mention should be made of the very fine awl Pl. cxxxix 23, from **I 29**.

7. *Chisels*.—These are not infrequent, especially in the earlier strata. They are bars of flint, oval, circular, or rectangular in section, with a chisel edge made at one end. The best examples, among which are figs. 29, 35, were found on the rock.

8. *Scrapers*.—The normal scraper is in shape a flat oval, with on one side the bulb of percussion close to one edge. The opposite edge is carefully bevelled, like a chisel, and trimmed with delicate chipping. The finest example found is represented on Pl. cxxxix 15: the drawing is to a smaller scale than the others in this plate. The original is 7" in maximum breadth. The outer surface of cores was preferred for this class of utensil, so that the side opposite the bulb of percussion is covered with a calcareous deposit. Upon this surface, ownership marks are sometimes scratched. Thus, there is a cross scratched on the large scraper Pl. cxxxix 5, and

an *aleph* in the old Hebrew alphabet on Pl. cxxxix 16. At the N. end of trench 2, there were found two scrapers, one on the rock, the other just under the surface of the ground. The first bears a double axe-head (Pl. cxxxix 21), the second a rude figure of an animal (Pl. cxxxix 22). On the rock outside the outer city wall, N. of trench 19, at a depth of 26 ft. a scraper was found with marks resembling  $\lambda + =$  scratched upon it. The most curious, however, is shewn in fig. 422 (*post*, p. 275). It was found on the Western Hill associated with objects of the time of Amenhotep III. It is a fragment only; this is very unfortunate in view of the peculiar nature of its inscription, which appears to be a  $\beth$  and a  $\beth$  of the Phœnician alphabet, *reversed*. The maximum length of the object is  $2\frac{3}{4}$ ".



FIG. 300.—FLINT CORE

In some of the smaller scrapers the edges are clean and sharp, and have not been trimmed with chipping. These are often worn smooth by long-continued use. Fig. 34 is an unusually large specimen, and fig. 30 is a smaller and neater example. Pl. cxxxix 4, may be a small axe-head, but is probably a scraper. Scrapers such as these disappear after the Third Semitic Period.

Probably rough flakes, like Pl. cxxxix 7, were also used for scrapers.

9. *Irregular Flakes*.—Many of these were no doubt mere waste chips; some may have been occasionally used for whatever purpose their shape suggested, such as knives, or, as just mentioned, scrapers. Others, however, have been shaped, and probably were intended for knives. The edge is rarely touched up with chipping. Fig. 28, which is from the rock, is one example, but no two are exactly alike; to illustrate even a representative series would be endless. These rough flakes are almost the only form of flint implement found in the Fourth Semitic Period.

10. *Cores*.—A few cores were found from which ribbon-knives had been struck off. Pl. cxxxix 6 is a remarkably regular specimen, and another good example is shewn in the accompanying fig. 300.

The tools described above are all formed by knocking large flakes off the core, and then trimmed by knocking further flakelets off the detached piece. This can be done

on one edge or on both. When the calcareous outer surface of the core remains on the flake (as in the scrapers), it is always on *that* side the flake is chipped. The edge in this case is naturally blunt, and is bevelled into shape by a multitude of minute chips. In knives, larger chips sometimes alternate with smaller, or groups of smaller ones. the larger chippings also are often touched up with minute flaking on the edges—especially in sickle-flints. As a rule the only place where chipping is found is on the edge; but sometimes, particularly in the earlier strata, knives and (especially) chisels were found covered with chipping all over. Pl. cxxxix 1, from the rock in trench 14, is a fine example. Not many similar to this were found.

The chipping with long parallel channels, such as is illustrated in the fine knife fig. 32, and to a lesser degree the tanged knife or spear-head (or borer?) fig. 37, was found in a few specimens, but is also rare. I have not sufficient material to determine exactly when it was in use. The first of these came *from the surface* at the S. end of trench 14. Here the soil had been much disturbed, and no doubt the knife was earlier than its context: and (as already mentioned) the second was also out of its proper surroundings, having been dropped into a cistern.

Besides flint, a very few specimens of tools in obsidian were found—not more than one or two in each stratum, if indeed there were so many. These must have been imported, as obsidian is not native anywhere near the mound.

An attempt is made in the following table to shew the chronological range of these different types of implements (ccc, cc—very common; c—common; r—rare; rr,rrr—very rare; a—absent).

	Pre-Semite.	First Semite.	Second Semite.	Third Semite.	Fourth Semite.	Hellenistic.
Ribbon-knives . . . . .	cc	cc	cc	c	r	rrr
Saws . . . . .	rr	rr	rr	a?	a	a
Pointed Knives . . . . .	c	c	cc	cc	c	rr
Sickle-flints . . . . .	a	r	c	cc	c	a
Spear- and Arrow-heads	a?	r	c	c	c	a
Borers . . . . .	r	r	r	r	r	a
Chisels . . . . .	a	r	r	rr	a	a
Scrapers . . . . .	r	c	c	r	a	a
Flakes . . . . .	cc	cc	cc	ccc	cc	r

## § 30.—THE POTTER

1. *Preliminary Observations*

So much has been written on Palestinian pottery in recent years \* that it might be supposed that the subject was exhausted, and that in a new excavation nothing would need to be observed but any exceptional or unique vessels that it might happen to yield.

In point of fact, however, so much material has accumulated at Gezer, and so much new light has been thrown on the subject of Palestinian ceramics by the excavations there and elsewhere within the past ten years, that it now becomes necessary to consider and to systematise the whole subject afresh almost from the beginning.

In the following account of the work of the potter, we shall begin with some necessary definitions of technical terms to be used in the succeeding pages, and then proceed to describe the characteristics of the different periods in turn, under the different headings of Foreign Imports, Technical Processes, Ware, Shapes, Ornamentation, and Potters' Marks. Reference is also given to the chief deposits of grouped pottery that were found. These best shew what types were exactly contemporary. The influence of the art of the great foreign civilisations is so profound that it will be necessary here and there to anticipate the subject of Chapter VIII in the course of our discussion. At the end of the section some notes will be given on the art of modelling as practised in the city, and on the use of glass.

2. *Definitions*

Unless special circumstances dictate otherwise, in describing vessels we shall always begin with the lowest part and work upwards

The **base** of a vessel may assume any one of the following forms:—

1 *Rounded*, in which the curve of the sides of the vessel is continued unbroken (as in Pl. xxiii, fig. 2)

2 *Pointed*, in which the curve is suddenly prolonged tangentially to a more or less sharp conical point

3 *Flat*, in which the curve is abruptly cut short by a plane surface at right angles to the vertical axis of the vessel†

\* See especially *TH*, pp. 40-50, *MMC passim*, *EP*, pp. 71-141

† As a rule the sides of the vessel appear as though they would form a pointed rather than a rounded base, if prolonged beyond the flat bottom

There are two subordinate varieties of flat bases, *concave* and *convex*, in which the bottom is not a perfect plane but curves gently inward or outward. Convex bases, which are rare, should be distinguished carefully from rounded bases: in the former there is an abrupt change of curvature round the outer margin of the bottom; in the latter the curvature is continuous

4. *Disc*, in which a projection shaped like an ordinary biscuit is attached to the vessel, for its greater stability. Disc-bases may be *plane*, *concave*, or *wavy*, according to the section of the lower surface of the disc

5. *Ring*, in which a projecting horizontal ring takes the place of the disc. The distinction between a ring-base and a concave disc-base can be understood by comparing Figs. 11 and 12 in Pl. lxxiii. A ring-base may by exaggeration in size develop into a foot which may be either cylindrical or trumped-shaped

The *body* of a vessel assumes a variety of shapes, most of which can be described by easily understood adjectives—spherical, cylindrical, ovoid, or the like

The *mouth* of a vessel may be circular or oval in outline, or in rare cases square. It may be *continuous* or *channelled*. In the latter a groove, wide or narrow, is drawn across the side of the orifice to direct the flow of the liquid, as in an ordinary milk-jug: in the former there is no such groove. The channel is generally open at the top, but in a few cases it is *tubular*.

A mouth anywhere but vertically above the middle of the base is called a *spout*\*

The base, body, and mouth are the three essential parts which every vessel must possess. The non-essential parts are the handle, the neck, the strainer, and the applied ornament

**Handles** are found in the following varieties:—

1. *Ledge-handles*.†—Flat bracket-like projections from the sides of vessels.

2. *Button-handles*.—Small projecting knobs on various parts of a vessel. There is a large variety of shapes of these, as will appear from the detailed descriptions below.

3. *Pillar-handles*.—So called from their shape, resembling a pillar with a cup-like capital spreading at the top. Sometimes the top is channelled with an open or tubular spout. The accompanying fig. 301 illustrates this: in the second of these there are two channels through the rim. It is evident that these were for pouring fluid *into*, and not out of, the vessel, and were more of the nature of filters than of spouts

\* In some vessels of Cypriot origin this distinction is not mathematically exact, as the neck is crooked. This is, however, accidental, and the name of "mouth" is retained for the orifice in this case.

† This name, introduced by Prof. Petrie, is, I think, better than "wavy handles," an alternative name later proposed by the same excavator. The latter does not describe the essential character of the handle, and the wavy form is not found in all specimens. The name "ledge-handle" itself is not wholly satisfactory. A ledge does not necessarily project outwards (a "ledge of rock" might be a narrow path with a precipice on one side and an overhanging cliff on the other), and in any case suggests an idea of continuity, as though it ran round the whole vessel. Were it not that the multiplication of technical terms is an evil to be avoided, I would prefer some such name as "bracket-handle."

4. *False-spout handles*.—Trumpet-shaped projections from the sides of a vessel. They are hollow, and resemble a spout, but the unbroken wall of the vessel stops the hollow at the inner end.

5. *Loop-handles*.—The common form of handle, such as we now attach to water-jugs, etc

6. *Ear-handles*—Small knobs or buttons, with a perforation drilled through them.\*

The points where the ends of loop- and ear-handles meet the sides of the vessel are called the *attachments*. When the line joining the attachments is at right angles to the vertical axis of the vessel, the handle is called a *transverse* loop or ear-handle.

To express the different forms assumed by the loop-handles, which is sometimes of importance in assigning a date to a vessel, certain terms such as "heart-shaped," "horizontal elliptical" and the like are used. These words properly describe the space enclosed by two similar jar-handles if held symmetrically with their corresponding points of attachment in contact.

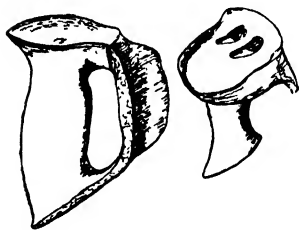


FIG. 301.—PILAR-HANDLE AND SPOUT

The *neck* of a vessel may be cylindrical, inverted conical, conical, convex, or concave; the last two being in shape like a pair of brackets, thus—()—and thus—)(—respectively

The *shoulder* of a vessel is the part intercepted between the circumference of the mouth (or of the base of the neck) and the horizontal line on which the lower attachment of a loop-handle would naturally be situated, whether there is or is not a change of curvature at this level: the upper attachment of the handle being on the edge of the mouth †

A *slip* is a coloured substance applied in a thin cream to the surface of the vessel before firing; a *wash* is a similar application made after firing. A slip is therefore permanent, whereas a wash can be removed by wetting and rubbing the vessel. The effect of both is to give a smooth surface to the pottery, which may or may not be further ornamented.

The terms used in describing ornament are self-explanatory, though it may be as well to note the distinction between *horizontal lines*, *circles*, and *rings*. Horizontal lines and circles are figures of the kind specified, so painted on vessels that they can be seen all at once. Rings, on the other hand, are horizontal lines produced so as to encircle the whole vessel, almost or completely: so that their extent cannot be seen without turning the vessel round.

\* Ear-handles are distinguished from loop-handles by (a) their small size, and (b) the proportion which the thickness of the handle bears to the space enclosed, which is small in the loop and large in the ear-handles.

† The definition is given in this rather awkward form as (1) there is often no loop-handle, and (2) there are sometimes cases in which the lower attachment of the handle falls within what is clearly the shoulder.

In naming the vessels it will be sufficient, and it seems to me desirable, to use such simple expressions as jar, jug, bowl, saucer, and the like, rather than terms borrowed from classical archaeology. Oriental words ("bilbil" and the like) which mean nothing to the Western reader, have been carefully eschewed.

### 3. The Development of Pottery

It is important to bear in mind what has been already said—that the division into periods is to some extent a necessary evil, in that it suggests a misleading idea of *discontinuity*—as though the periods were so many water-tight compartments with fixed partitions between them. In point of fact, each period shades almost imperceptibly into the next. The middle point between the chronological limits assigned to each period represents approximately the time when the characteristics noted were most prominent.

The following preliminary table will perhaps facilitate the study of the detailed description of the pottery of each period upon which we must now enter. The salient points in each are collected and set forth so as to be seen at a glance:—

	Pre-Semitic, to B.C. 2000.	First Semitic, B.C. 2000-1800.	Second Semitic, B.C. 1800-1400.	Third Semitic, B.C. 1400-1000.	Fourth Semitic, B.C. 1000-550.	Hellenistic, B.C. 550-100.
FOREIGN INFLUENCES.	None.	None	Egypt, Crete, Aegean regions, especially Cyprus (direct influences).	Same as preceding period, but rather a reminiscent influence.	Influences of Second Semitic fading. Fresh imports from Cyprus.	Greece and Greek Islands.
TECHNICAL PROCESSES	Hand-modeling.	Potter's wheel worked by hand.	Potter's wheel worked by foot.	Same as Second Semitic	Same as Second Semitic	Same as Second Semitic.
WARE . .	Coarse, gritty, on the whole soft-baked.	Similar to Pre-Semitic, but finer and more varied.	On the whole well-refined and good.	Various, good and bad.	Various, mostly bad.	Well-refined and hard-baked
SHAPES .	Rude and limited in variety.	Improved and more varied.	The best and most graceful shapes in this period.	Fairly good.	Clumsy and coarse	Very fair imitations of classical models.
ORNAMENT .	Moulded and drip-line paint.	Moulded and painted horizontal bands.	Elaborately painted, but little moulded.	Degenerating painted patterns. Practically no moulded.	Coarse mouldings and painted rings.	Moulded if any, a few well-painted examples

N.B.—Between the Fourth Semitic and the Hellenistic comes the *Persian Period*. This is so much a transitional period that it cannot conveniently be considered apart. Its characteristics are therefore described in connexion with the periods with which it shares them.



4. *Details of the Pottery in Successive Periods*

## A.—THE PRE-SEMITIC PERIOD

(i) **Foreign Imports.**—No foreign influences affect the indigenous ware of the Pre-Semitic Period.

(ii) **Technical Processes.**—No attempt seems to have been made at cleaning and refining the clay. Vessels were modelled with the hand of the potter, and without the aid of a wheel. Large vessels were moulded by being built up from the bottom in instalments. The vessel (after receiving the ornament destined for it) was fired, the heat being often very irregularly distributed and producing differences



FIG. 302.—PRE-SEMITIC JAR

of colour on the surface. As a rule the vessels of the Pre-Semitic Period are baked soft. A few seem to have been simply dried in the heat of the sun, and attempts to wash them reduced them to the mud from which they had come.

(iii) **Ware.**—The clay mostly used is a coarse and gritty limestone earth, with many grains of flint—sometimes as much as  $\frac{1}{8}$ " in diameter—in its composition. The surface has usually a drab colour, with, in most specimens, a distinct reddish tinge. The section of a broken sherd is always of a lighter colour than the surface. In appearance it resembles coarse oatmeal porridge, the colour, however, being nearer to a straw tint, and the grits which complete the analogy being dark, sometimes almost black. On this account the name "porridge" ware is occasionally used in these pages.

Another clay, not so common as the flinty clay just described, is full of fine quartz grit. This is considerably harder than the last. The section is of a Vandyke brown colour.

There is another clay, full of soft limestone gravel, with little or no admixture

of flint. Vessels of this clay break very easily. It is so porous that it can never have retained liquids for any length of time.

(iv) **Shapes:** (a) Jars of moderate size, flat bases, bodies globular, conical, or cylindrical, concave neck, two small loop-handles on the sides. Fig. 302 from cave 19 I, is an excellent example. The right-hand specimen of fig. 303 is similar, but has ledge-handles. Note the numerous handles on the left-hand specimen in the same figure. In fig. 304, also from cave 19 I, there are *four* loop-handles.

(b) Bowls with flat base and barrel-shaped body. There may be a spout as in Vol. I, fig. 31.

(c) Jugs with rounded base, globular body, short straight neck, circular mouth, one loop-handle. In the specimen fig. 305, no. 1, the handle, now broken, has been deeply channelled on the back so as to appear double. Compare the fragment of a handle Pl. xix, fig. 5.

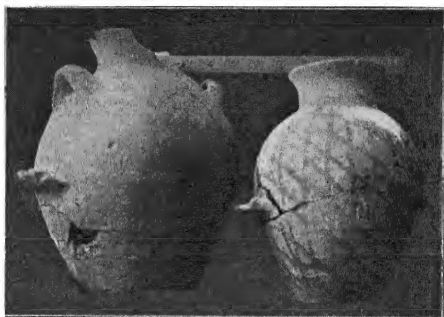


FIG. 303.—PRE-SEMITIC JAR

(d) Jugs with rounded base, cylindrical body, and one handle (fig. 305, no. 4).

(e) Jugs with flat base, globular body, no neck. There is a remarkable plethora of handles in the example figured—two transverse loop-handles and two ledge-handles (fig. 305, no. 5). This is by no means a unique case: compare the left-hand jar in fig. 303.

(f) Jugs with rather flattened globular body, cylindrical neck, two small loop-handles (fig. 305, nos. 6, 7: the latter of these, which has a concave base like a modern wine-bottle, may be First Semitic).

(g) Shallow bowls with flat bases and straight sides expanding upwards like the limbs of V. These are not common vessels in this period: a large specimen was found in cave 20 I.

(h) Saucers with rounded (occasionally convex) bases, sides rounded, occasionally recurving towards the mouth. The height of the vessel is small in proportion to its diameter. The edge round the mouth is usually sharp (fig. 305, nos. 2, 3).

(i) Saucers with flat base and ogee-shaped sides. These are rare (fig. 305, no. 8). A group of representative Pre-Semitic saucers is shewn in fig. 306. The moulding on the upper left-hand specimen of these is unusual.\*

(v) **Ornament:** (a) *Combed*.—This is very common and indeed perhaps the most characteristic decoration of the earlier periods. It is less prevalent in the Pre-Semitic than in the First Semitic pottery. It consists in scraping the face of pottery with strokes, vertical, horizontal, or diagonal, of a wooden comb, notched with teeth of greater or less fineness. As a rule the older the specimen the coarser the denticulation and the more irregular the strokes by which the tool has been applied.

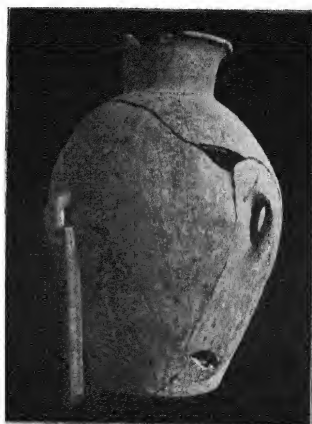


FIG. 304.—PRE-SEMITIC JAR

An analogous process to combing is the smoothing down of the surface of a vessel with a straight-edged tool, probably the side of a stick. This has not often been done in Pre-Semitic vessels, but examples are sometimes found: thus the fine jar fig. 304 showed evident marks of the vertical strokes of the smoothing tool.

(b) *Burnished*.—This is rare, though not unknown in the cave pottery. It consists in rubbing the vessel with strokes of a smooth bone or stone, so as to compress the surface of the pottery and to produce lines which stand up glazed and shining against the surface of the vessel after firing. Sometimes the burnishing

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\* To avoid misapprehension it should be noticed that a string is tied in the moulding to keep the fragments of this saucer together while being photographed.

failed in its intended effect, and the lines appear simply as a series of scratches or grooves

(c) *Moulded and Incised*.—This is the commonest form of decoration in the cave pottery. In all cases it is an imitation of cords, or of the marks which cords would make in the surface of the pottery, and probably was suggested originally by actual cords with which the primitive pots were tied to prevent them falling apart before baking. Relief moulding is an imitation of the cords, incised moulding of the impressions of the cords: the former is, therefore, continuous, the latter a discontinuous series of indentations. This distinction is observed in the Pre-Semitic Period, though it disappears in the First Semitic. The representation of moulded ornament in the Pre-Semitic Period is always naturalistic, the various conventional forms that the First Semitic potters introduced being unknown.

(d) *Coloured*.—The only coloured decoration at first is a band of dark brick-

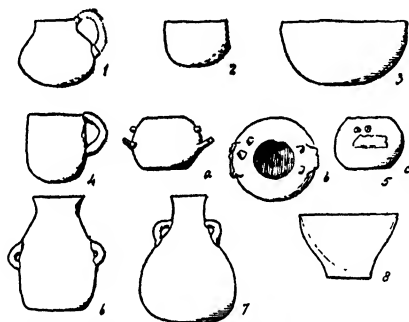


FIG. 305.—PRE-SEMITIC POTTERY (FOUND IN THE CREMATORIUM)

red round the rim of jugs or saucers. When this was applied too wet, it flowed in irregular drips down the sides—these were imitated by the Troglodyte potter, who sometimes decorated his ware with unsteadily painted vertical red lines (see Pl. cxl, fig. 1, also Pl. xxii, fig. 5). The most advanced stage reached was a fret of red lines as in fig 303, no. 2. The red is of various hues, from a dark, almost black shade, to a light orange colour: this may, however, be a consequence of differing intensity in firing. A dark brick or Indian red is, however, the commonest. The colour was mixed on flat stone palettes, some of which were found in the caves. After the vessel was fired a white wash of lime cream was often applied to the whole surface (except the bottom). This adhered to the surface of the ware, except where the red colour already occupied the porosity: the red thus stands out against a white background. This white wash is easily removed in water, but the red remains.

(vi) **Potters' Marks** seem to be unknown in this period

## B.—THE FIRST SEMITIC PERIOD

(i) **Foreign Imports.**—There are no certain foreign importations during this period.

(ii) **Technical Processes.**—The wheel was almost always used for large vessels and for most of the smaller type as well. Minute saucers are sometimes modelled by hand. The direction of rotation of the wheel, which can be deduced from various indications,\* was always counter clock-wise, showing that the wheel was rotated with the left hand, while the right manipulated the clay.

(iii) **Ware.**—So far as I have observed, limestone clays are exclusively used by the Pre-Semitic potters. Sandstone clays, however, are freely employed by



FIG. 306.—PRE-SEMITIC SAUCERS

those of the First Semitic Period. A very characteristic type is of a Venetian red colour on the surface, porous in texture, soft-baked, and with a tendency to scale, owing to the many fissures in the section parallel to the sides of the vessel.

Another sandstone ware is of a light cream colour both inside and out.

The gritty, "porridge-like" ware persists into the First Semitic Period. The surface and section, however, look more homogenous, as the larger flinty grits are refined out of it.

The globular bowls—shapes (*i*) below—are often made of a superior type of clay, brownish in section with small white limestone grits scattered through it,

\* Such as the appearance of the point where horizontal rings, painted or incised round the sides of the vessel, are closed; or the direction of the little spiral rosettes sometimes produced on the upper surface of the bottom of the vessel by the rotation of the clay.

though not very thickly. Like the majority of the vessels of this and the preceding period, this ware is drab on the outer surface.

There is another type of ware which is very distinctive, found on the rock only, never in the caves, and never in the upper strata, so that it must have been in use during a very limited time. Vessels in this ware are usually found in groups, so that it was probably the luxury of a few wealthy persons. The shapes of vessels made in this ware are as distinctive as the ware itself, and form quite a group by themselves. The clay is fine and well cleaned, rather fat in texture, and is always covered with a rich cream-like slip. On this account I give the ware the name

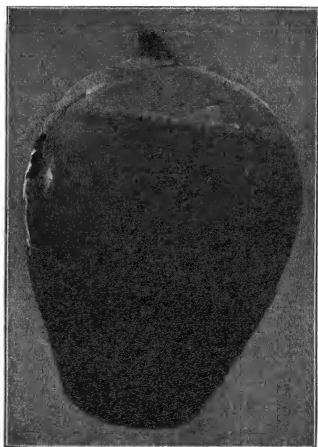


FIG. 307.—FIRST SEMITIC JAR

"cream ware" in the following pages. The chief types of vessels found in this ware are shown on Plate cxli.

Another ware of superior class is of a perfectly homogeneous clay, Venetian red in section, breaking easily; the surface is always highly burnished with both vertical and horizontal strokes of a burnishing tool. The colour sometimes ranges in one vessel from a rich brownish red to orange, in irregular patches, no doubt owing to unequal firing.

(iv) **Shapes:**\* (a) Jars with flat bases: inverted conical bodies and more or

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\* It is of course impossible to present anything like a complete catalogue of the *nuances* of which pottery-shapes are capable within the limits of a single period. There is hardly a single vessel that has not *some* individuality, and thus attempts at classification are often much embarrassed.

less abrupt rounded shoulders; concave necks, sometimes resembling a pulley wheel in shape, and sometimes with a straight section in the middle, expanding above and below. The mouth is always wide, continuous, circular, and surrounded by a flat widely-expanding lip. The height of these vessels averages about 2'. There are often no handles (as in Pl. cxlii, fig. 22), but frequently the vessel is provided with two ledge-handles, or else (less commonly) loop- or pillar-handles: in a few exceptional cases transverse loop-handles on the shoulders were noted. There is usually a band of moulding at the change of curvature. These details are well shown in the fine example illustrated, fig. 307: in Vol. I, fig. 26, is shown another specimen, provided with ledge-handles; there is no moulded ornament in this specimen, but groups of vertical red

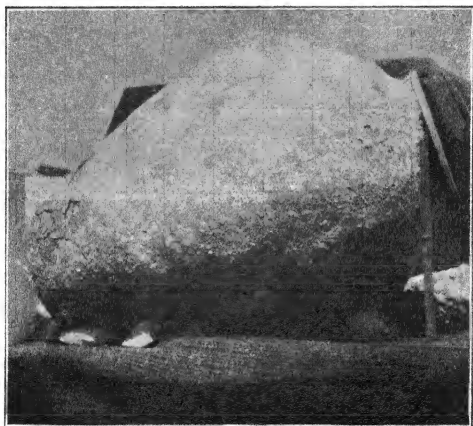


FIG. 308.—FIRST SEMITIC JAR

lines are painted on it at intervals, which appear in the photograph. Fig. 308 (which is the jar found containing an infant's bones, in the Crematorium) is another simple example. These are much more regularly formed than the similar lines in Pre-Semitic ware. Pl. cxliii, fig. 21 is a miniature specimen with ledge-handles and vertical red lines painted on the sides: Pl. cxliv, fig. 5 is similar. Pl. cxlv, fig. 10 is a variety in which the body is not so high in proportion to the width, and is spherical rather than conical. This specimen is decorated with broad red lines painted directly on the surface of the vessel. The ware is of the "porridge" texture already described.

(b) Jugs with flat base, inverted conical or globular body contracting to a short wide neck, continuous circular mouth, one loop-handle. Small drab vessels of this ware are very common; examples are Pl. cxliii, figs. 10, 16. In the drab hand-made example

Pl. cxlvi, fig. 12, the neck is continuous with the body of the vessel, and the bottom is rounded. The fragment Pl. cxlii, fig. 11 is similar. Four vessels of this kind were found in II 28: one of them is shewn on Pl. cxlii, fig. 1. The photograph of these vessels, fig. 309, shows their general appearance and texture. They ranged in length from  $3\frac{3}{4}$ " to 6". With them was a small jug of essentially the same type, but with longer neck and two ear-handles (Pl. cxlii fig. 2), the fragments with rope-moulding and with a ledge-handle, figs. 3, 4, and the flint knife, fig. 5. Three of the jugs lay in a line, the base of each in the mouth of the next; the other sherds were lying round. In Pl. cxliii, figs. 11, 12, a variety is seen in which the neck is prolonged and cylindrical. The former is probably very late in the period, if it does not actually belong to the Second Semitic Period: the bold painted zigzag in red seems to suggest this. There is a hole broken through the side of fig. 12. In another variety two ear-handles take the place of the single loop-handle. This is the case in Pl. cxliii,



FIG. 309.—FIRST SEMITIC JUGS

fig. 19, where the handles are of peculiar shape. Another variety without the handle is illustrated by the small hand-made pot, Pl. cxlv, fig. 14, found in II 15. It is in a light gritty ware; Pl. cxlvii, fig. 7 is a variety with rounded base in red ware, and with ledge-handles; and fig. 18 on the same Plate is similar, with a loop-handle.

(c) Jugs with flat base, body inclined to be cylindrical, long cylindrical neck and one loop-handle. A specimen is shown in Pl. cxliii, fig. 13: it is of a rather fine ware, and ornamented with horizontal burnished lines. This easily develops into fig. 15, which is an early experiment at a shape very characteristic of the Second Semitic Period. Likewise the small vessels Pl. cxlii, fig. 9, and Pl. cxlvii, fig. 19 are anticipations of the variety of this type in which the body is an inverted cone, not a cylinder. Plate cxlii, fig. 12 is a specimen with no handle.

(d) Jugs with flat base, globular body contracting to a cylindrical neck, and small ear-handles. Often found in the cream ware, when it is generally elaborately decorated with red paint. Pl. cxli, fig. 5 is an example which has four ear-handles—an unusual number in early ware. Pl. cxliii, fig. 20 is a variety remarkable for the



unusual shape of the handles. In Pl. cxlvii, fig 10, which was in slate-grey ware, there was an ordinary loop-handle, of which, however, only the stump remained. Pl cxlvii, fig. 3, in brown ware burnished, is similar to this, only the neck expands upwards. These last may also be assigned to type (c): it is not always easy to assign a proper place to transitional forms.

(e) Jug with flat base, cylindrical body, transverse loop-handle and spout. The fragment Pl. cxliii, fig 17 represents such a vessel. No other specimen similar to this was found.

(f) Cylindrical jugs with round base and two loop- or ear-handles, which are rather shorter vertically in proportion to their curvature than is usual in these early vessels. A minute example of this, ornamented with painted lines in black and red, is figured in Pl cxliii, fig. 14. This, though found on the rock, is probably a Second Semitic vessel: the form is much more characteristic of that period.

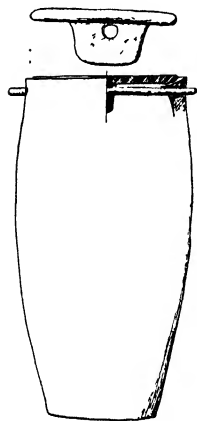


FIG 310—COVERED JUG,  
FIRST SEMITIC PERIOD

(g) Jugs with flat base, cylindrical body with slight entasis, and no neck. A good example  $4\frac{3}{4}$ " high of this not very common type is shewn in fig. 310. The details of the cover of this vessel and its fastening are described below. Pl cxli, figs 2, 8 are specimens of this type in the cream ware, the second of these has a button-handle touched up with a dash of red.

(h) The small rude jug Pl cxlvii, fig 8 is rather an anticipation of a type that becomes normal (for large jars) in the Second Semitic Period: with long conical body and two loop-handles. It is quite unusual in the First Semitic Period. Somewhat similar, though with only one handle, is the clumsily made hand-modelled jug, fig 11 on the same Plate.

(i) Bowls, as Pl. cxlv, figs. 15, 16, with flat bases and globular bodies, curving inwards at the top; wide circular mouths without neck or lip, the surface often finished off with a finely toothed comb, covering it with fine ridges.

There are two holes punched through the sides of fig. 15. Pl cxliii, fig 18 is a small example. The barrel-shaped jugs described above (g) may perhaps be treated as a variety of this form of vessel: and through these the transition is easy to a cylindrical beaker with rim curved outwards instead of inward, of the type of Pl. cxliii, fig. 14, this is one of two found on the rock near the entrance to the Water-passage. The form is, however, not very common. Pl cxlvi, fig 8, a beaker in drab ware, resembles this, but has a slightly convex rounded base; and fig. 20 on the same Plate is another specimen, with sides rather more oblique. Both varieties are illustrated in the group of three, Pl cxlvii, figs 25-27, found together in II 28. The rims of two of these have a line of red paint covering them. A unique development of the beaker, with two loop-handles, and a filtering screen closing the mouth (an excessively rare detail in this early period), is shewn in Pl lxxix, fig 22.

(j) A variety of (i), but with a round spout in the side an inch or so under the lip. The lip of this spout is usually thickened, or else it is surrounded by a collar either cylindrical or, more commonly, expanding like the bell of a trumpet as Pl. cxlviii, fig. 14. Pl. cxliii, fig. 9 is a small example; a fragment of a specimen in cream ware is shewn in Pl. cxli, fig. 11. Other varieties of the type are provided with *filtering* spouts, and others, as Pl. cxliv, fig. 4, with ledge-handles.

(k) Bowls with flat base and straight sides expanding outwards like a V. These are a development of the beaker-shaped vessel already described under type (i). A fragment of a large specimen with ledge-handles and drip decoration, from cave 30 II is shewn in Pl. cxlv, fig. 9. Vessels of this type are often found in the cream ware: such are Pl. cxli, figs. 1, 4, 6, 9, 10, and 12, and Pl. cxlvi, fig. 17, among which are some minor varieties with curved or angled sides. Pl. cxlv, fig. 8 is a rare variety with a moulding just under the lip. This vessel is hand-modelled in red ware, not gritty but with many airholes in its texture. It comes from II 30. Pl. cxlvi, fig. 11 is a specimen in ordinary reddish ware. Pl. cxlvii, fig. 13 is similar in this detail, though the shape differs to some extent, and there is evidently an incipient disc-base, which is uncommon in this period. Even more unusual is Pl. cxlvi, fig. 4, which is a sherd of a hand-modelled bowl similar to these, and having in addition a number of small ornamental handles surrounding it. Pl. cxlv, fig. 17 is the bottom of such a V-shaped bowl, ornamented in the inside with zigzags, lines, and dots. It comes from a rather late context, and may possibly date early in the Second Semitic Period.

(l) Saucers of the common hemispherical pre-Semitic type are not so common in this period, though by no means unknown, as shewn by Pl. cxlvi, fig. 9, which is in the ordinary drab ware. Pl. cxlvii, fig. 20 is an example, which has an ear-handle; such an addition is never found in the cave pottery. Other specimens are noted below with the pottery-group from the Crematorium.

(m) Saucers with narrow flat base, sides curving outwards and then recurving slightly. Pl. cxlv, fig. 13 is an example, from the Crematorium. There is a red-painted edge. The four nicks are probably a potter's mark. This type of vessel is also found in cream ware: Plate cxli, fig. 3, is a large-sized example. The edge is always *sharp*. Saucers of this form are rather less common than the V-shaped type (k). In Pl. cxlii, fig. 13, the potter's finger has been drawn round the mouth of the saucer to make a moulding. The four nicks on the side are most likely the potter's mark, as on the other saucer just mentioned above. This vessel is in rough drab ware.

(n) Hemispherical saucers with a spout projecting from the side a short distance below the rim, resembling miniature examples of shape (j). These are found only in cream ware.

(o) Fire-trays, which are cylindrical vessels, *hand-moulded*, of very coarse, brittle, porous ware, with little cohesion between its particles; in consequence all the examples found were in small fragments. Pl. cxlii, fig. 17 represents one of these. The diameter of these vessels was about 1' 6", they were circular, with flat base and vertical sides, about 6" high. Below the lip is a ring of holes drilled through the side, under which is a raised moulded band, sometimes ornamented with nicks. Below this, the side is decorated with vertical channels, seemingly streaked down roughly with the fingers.

These vessels are generally blackened with smoke, and appear to have been used as braziers for containing or carrying fire.

(p) Y-shaped cups, which consist of a bowl about 4" deep, in section resembling a V, prolonged below into a solid cylindrical point about  $\frac{3}{4}$ " in diameter and about 2 $\frac{1}{4}$ "-3" long. Very few unbroken examples were found, though this must have been one of the commonest forms of vessel in the First Semitic Period. The solid bases of such cups, with the more fragile upper part broken away, were found literally by scores in every pit as soon as the rock stratum was reached. Specimens were also found in cream-ware Pl. cxliii, figs. 1, 2 are examples. These are both decorated with red paint; in the one a shallow ring round the edge, in the other covering the greater part of the vessel. Such decoration seems to have been applied to the majority of vessels of this type.

(q) Ointment pots, which are little globular vessels with rounded base, body inclined to be conical, and long inverted conical neck, the total height being about 3". Two ear-handles, in the angle between neck and shoulders. Pl. cxliii, figs 4, 5, 8 are examples. Fig 3 is a variety without a neck. Fig 6 is similar, decorated as these vessels so often are, with a fret of red lines. In fig 7 there is a specimen of larger size than usual, with vertical lines painted upon it. Some of these vessels (e.g. 4, 5) are hand-modelled. This is one of the commonest types of vessel found, in the early strata. See also Vol. I, p. 108, fig. 37.

(r) In Pl. cxlvii, fig. 14 is a small fragment (from II 18) of a unique vessel. It is a pity that it was so incomplete, as it is not possible to be quite certain about its form. It seems to have been a tray, consisting of a flat disc of pottery, resting on three (?) legs, and adorned on the top with a fret of crossing lines. Nothing like it was found elsewhere.

(s) Another unique form is shewn in Pl. cxlvii, fig. 22, also unfortunately incomplete. It came from II 30. It consists of a conical vessel with moulded rim standing in a dish or a saucer with flat base. It is thus an anticipation of the "cup and saucer" vessels that came into fashion at a later period. Another apparent anticipation of this type of vessel, from II 29, is shewn in Pl. cxliv, fig. 12. It is a solid moulded disc, with the base of a narrow cup-shaped projection rising from it. Note the channel draining out of the side of the bottom of the cup. The upper surface of the base is flat, not concave and saucer-shaped, as in the later examples.

(t) is also unique (Pl. cxlvi, fig. 13). It is a slab (probably rectangular with curved sides, but one end is broken away) of light homogeneous ware. The two long sides are thickened with a rim, as shewn in the section, but this is not the case with the surviving end, which is unbroken. From the side project two perforated button- or ear-handles, as shewn.

(u) Minute vessels, possibly toys, are occasionally found in this period. Thus the little vessel shaped like a modern egg-cup, Pl. cxlvii, fig. 9, which is sun-baked and only 1 $\frac{1}{8}$ " high, might very well belong to some ancient equivalent of a doll's tea-service! It is not easy to think of any more serious purpose for it. It came from I 16. To the tiny hand-made pottery cup fig. 12 on the same Plate, similar remarks apply. The curious object Pl. cxlvi, fig. 19, which is 2" long, came from the cave

19 II, and may perhaps be Pre-Semitic. It is a bar of pottery, hand-modelled, with a small depression at each end, apparently made with a finger-thrust.

(v) The peculiar vessel Pl. cxlv, fig. 11 was found in II 13. It is probably a potter's freak: nothing like it was found elsewhere. The same may be said of the oval boat-shaped vessel Pl. cxlii, fig. 21. It was in drab ware from II 5.

(w) The small double vessel Pl. clxxvi, fig. 5 was found in the First Semitic cistern at the N end of II 21, it consists of two hemispherical saucers joined together, and united by a channel. Such double vessels are very rare in the earlier periods, though found not infrequently in the later.

(v) **Details:** *Bases* are almost always flat. They are sometimes hollow (not hollow disc) as in Pl. cl, fig. 12. In one of the caves there was found associated with First Semitic types the bottom of a vessel with three looped handle-like legs, such as appear in Pl. lxxxii, fig. 1. This is a unique case in such early ware.

*Handles.*—The commonest form of *loop-handle* is shewn on Pl. cxlviii, fig. 23. It is a horizontal oval, rather shorter vertically than horizontally, in section a rather narrow triangle with rounded corners. Numbers of these handles were found on the rocks and caves, but never in the upper strata. Broad and flat loop-handles are, however, not unknown, as Pl. cxlix, fig. 6.

From Pl. cxlviii, fig. 7 it would appear that the effective way of forming loop-handles of two bars side by side, separately modelled, but adhering along the whole length, had already been invented in the First Semitic Period. In this example a third and narrower bar lies along and conceals the line of junction. There are in addition two pellets fastened on at the base. Though found in a First Semitic context, however, I am not sure that this is not actually of the Second Semitic Period. But in the roughly hand-modelled fragment fig. 10, on the same Plate, a similar kind of handle seems to be imitated with grooves. This is very common in First Semitic ware, and indeed in Pre-Semitic, as already mentioned.

The coiled end of a loop-handle Pl. cxlviii, fig. 29 was found in II 30. Nothing like it appeared elsewhere in the whole excavation.

*Ledge-handles*, in their simplest form, are semicircular, rectangular, or semi-elliptical projections from the sides of the vessel, convex both above and below (Pl. cxlviii, fig. 11, where the edge is ornamented with a series of nicks). See also Pl. cxlvii, fig. 24, which shows the top surface of such a handle in a homogeneous grey ware, covered with a fatty yellow slip, with traces of red paint and ornamented with scratched lines. This form is, however, uncommon. Still more infrequent is a flat rectangular tongue, *plane* both above and below (Pl. cxlviii, fig. 3). In the majority the upper surface is concave. The projection is sometimes without ornament: occasionally there is *one* indentation in the edge, as Pl. cxlviii, fig. 28: but more frequently a row of little nicks is cut with a knife along the edge. These nicks are yet more often made with the fingers, and manipulated into waves along the edge, with a corresponding scalloping of the surface of the handle. A good typical example is Pl. cxlviii, fig. 26. Not infrequently the scalloping is confined to the lower surface, the edge being continuous, as in Pl. cxlii, fig. 4. In Pl. cxlix, fig. 1 the waves come in contact with the sides of the vessel. In fig. 4 they become vertical channelling; there is a hole partly through this specimen. Sometimes, but rarely, a series of impressions of

finger-prints is formed along the edge of the handle, as in Pl. cxlviii, fig. 12, which is of an unusual rectangular shape: *ibid* fig. 19, which is remarkably small. A variety of ledge-handles was sometimes found—no specimen, however, intact—consisting of a long narrow shelf projecting lengthways and horizontally from the rim of a bowl, like the handle of a frying-pan. They were almost always perforated for suspension. Pl. cxliv, fig. 15 is an example. It is less common to find a ledge-handle of the ordinary type so perforated. Pl. cxlvi, fig. 10 is a specimen, with two perforations. These are evidently for suspending the vessel by a looped cord.

The ledge-handle is sometimes in an unusual position. Thus Pl. cxlviii, fig. 13 (which is of the smallest possible dimensions) is just under the edge of a globular bowl.

The decorative example of a ledge-handle in Pl. cxlix, fig. 3 is interesting, as it almost seems to contain the germ of an ornamented transverse handle found in some later bowls.

Occasionally ledge-handles are attenuated to a mere ornament, so small as to be of little or no practical use. Thus one specimen was found  $1\frac{1}{2}$ " long with only  $\frac{1}{4}$ " projection. When used on *small* vessels (like the saucer of which Pl. cxlvii, fig. 5 is a sherd) they can only be ornamental imitations of features which have a practical use in large vessels of similar type.

Minute handle-like projections of other forms are also sometimes found. They are all merely ornamental. Consider for example Pl. cxlii, fig. 18, a vessel in red ware found in II 16. The top of this is broken; the present height is  $9\frac{3}{8}$ ", but it is never much greater. It has a flat base, slightly expanding body, and wide cylindrical neck. There are three pairs of little knobs like button-handles on the sides—quite too small to be of any practical use for holding the vessel.

A variety of ledge-handle—forming indeed a connecting link between this form and the button-handle—is shewn in Pl. cxlvii, fig. 4. This consists of the lateral broadening outwards of the rim of a flat dish. The specimen figured is perforated, no doubt either for the attachment of a cord or basket-work handle, or else for a string for suspension.

U-shaped ledge-handles are sometimes found, though they are unusual. Pl. cxlvi, fig. 6 is an example. Another of even more uncommon form is shewn in Pl. xxiii, fig. 22.

A specimen of the *pillar-handle* will be seen in Pl. cxlix, fig. 5. The groove that is shewn in this example is a very common feature.

One form of *button-handle* is a strip of pottery folded into a V-shape and bent over the rim of the bowl, the angle of the V being on one side and the ends of the limbs on the other (Pl. cxlviii, fig. 2).

Often the button-handle degenerates into a mere knob, which may or may not have a hole through it. Pl. cl, figs. 6, 8 are examples of both kinds, as are also Pl. cxlix, figs. 13, 18, 19 (note the cross on the point), 21, 22 (a square knob)—20 and 25 are double, but may perhaps be fragments of a series of knobs surrounding the whole vessel.

An example of an *ear-handle*, unique in its elaboration, is shewn in Pl. cxlviii, fig. 27. This came from II 29. The bifurcations at top and bottom are remarkable

features. Another type, much commoner, is shewn in Pl cxlix, fig 9. It resembles in style the ledge-handle shewn in fig. 4 of the same Plate.

*False-spout Handles*, defined above (p. 130), are fairly frequent in this period. A very uncommon type, not expanding in trumpet form, but conical and contracting, will be seen in Pl. cxlvi, fig. 16. It is in red ware Pl. cxliv, fig 14 has apparently been originally another form of pseudo-spout handle; but it has evidently been broken from the vessel to which it belonged and applied to some secondary purpose

*Spouts*, when they occur in the spouted bowls, shapes (*j*), are short in comparison to their width, and cylindrical, though more generally turned up slightly in their course. In some cases a filter is provided, the wall of the vessel being pierced with a number of small holes, not with one large orifice. An example of this from II 29 will be seen in Pl. cxliv, fig. 17 Pl. cxlviii, fig. 14 is a trumpet-shaped spout, which is also common. Pl. cxlvii, fig. 1 is an example of the most frequent type.

In a few vessels, especially bowls and large saucers, there are two holes drilled side by side through the rim, just under the edge. These may be for passing a cord through by which the vessel could be suspended on the wall. There are, however, other purposes for such holes. Sometimes (not so much in the First Semitic as in later periods, however) adjacent fragments of vessels are found with corresponding holes on each side of the fracture—shewing that they had broken while in their owner's possession, and that an attempt was made to repair them, either with metal rivets, or (more probably, at any rate in the pre-Hellenistic periods) with leather thongs or stout cords. One fragment was found in the Hellenistic stratum with a bronze rivet inserted and tightly secured in a hole drilled through it. It was only vessels which, for their size or special decoration, might be supposed to be of value that were so riveted. The ordinary pottery was probably as cheap as it is now, and a substitute was easily procured \* when a piece got broken

But there was yet another use for holes drilled through the sides of vessels. Two, cut through opposite sides of the edge, were of use for securing a cover. This is illustrated on the drawing fig. 310, *ante*. It shews a vase of type (*g*) with a circular disc cover, exactly fitting the slight moulding round the orifice of the mouth. A flat tongue depends downwards from the middle of the cover, with a hole pierced through it. There are two corresponding holes in the sides of the vessel, and a rod can be passed through all three openings, as the drawing shows, thereby of course tightly securing the cover. Cords could be tied to the ends of the rod, and either sealed to prevent its withdrawal, or looped together to suspend the vessel on the wall.

*Jar-stoppers*—As in modern Palestine, a wad of grass or a stone or a lump of clay was probably used in the majority of cases to cover vessels. But roughly baked clay stoppers were common in all periods, as well as stoppers of soft stone trimmed to shape. A more formal kind seems to have been introduced in the

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\* In fact the term of usefulness of an ordinary water-pot is very short, even if no accident happen to put an abrupt end to it. The vessel is serviceable only so long as it remains porous, as only thus in the hot summer of Palestine does the water contained remain cool. The impurities held in suspension by the water before long choke the interstices of the vessel, and in about two or three months' time it loses its porosity and a new pot has to be provided.

First Semitic Period, though it was commonest in the Third\*—shaped like a saucer with two loop-handles, end to end, occupying one of its diameters Pl. cxlvi, fig. 18 is an example

Some stoppers for small vessels are shown in Plate cxliv Fig. 2 has a perforation through it, no doubt for a stick which also passed through two corresponding holes in the sides of the vessel, as described below. The nick at the end of the stopper is not so easy to explain In fig 3 there are evident marks of the cords stretched across the stopper while the latter was not yet dry Fig. 6 is similar to fig. 2, with a perforated projection. It is remarkable that this cover is oval, so that the ends must have spread out beyond the lip of the vessel. Several such oval jar-

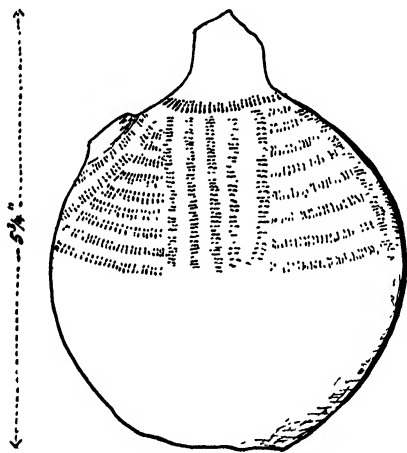


FIG. 311.—SHERD WITH ORNAMENT OF DOTS MARKED WITH A COMB

covers were found, in all periods to the Third Semitic: they are rather a puzzle, for no vessel with a corresponding oval mouth was discovered

The disc of pottery with a cross scratched on it, Pl. cxlvii, fig 6, is also no doubt a stopper for a small pot The cross may be a guide for laying the string and for keeping it from slipping.

(vi) **Ornament:** (a) *Combed*.—This is more frequently used and better executed than in the Pre-Semitic Period. Pl cxlv, fig 12 is a good example of a V-shaped bowl decorated with combing over its entire surface. A stroke of the comb down the back of a loop-handle is sometimes found it is curious how often this is

\* But by no means frequent even then.

unsymmetrically placed, as in Pl cxlix, fig. 8 Pl cxlvii, fig. 21 is a sherd of a vessel ornamented with combing, which has been chipped and perforated to make a spindle-whorl.

A combed cross, as Pl cxlix, fig. 23, is a common decoration on the top of a tray. The inverted V pattern, fig. 26 on the same plate, which is scratched on a sherd decorated with horizontal combing, is probably executed with a comb of wider teeth. The sherd fig. 311, found in II 2, is decorated with rows of points apparently produced with the tip of a comb.

(b) *Burnished*—Irregular strokes of the burnishing tool are used, as in the Pre-Semitic Period, for varying the surface of common pottery. But on pottery of the better class what may be called *continuous burnishing* is in this period used for decoration. Here each stroke is immediately alongside, if it does not actually overlap the stroke next to it, so that the whole surface at first sight appears to be covered with a burnished gloss. The separate strokes are, however, visible on close inspection. Variety is sometimes produced by combing groups of horizontal strokes with vertical: there is thus a highly effective play of light over the vessel. The colour of vessels thus ornamented is generally a rich brownish red, though it tends to become orange in parts. This process was probably found in time too laborious: it lasted into the Second Semitic Period, when it was much improved, and suddenly died out. Either the whole surface of the vessel is burnished or the pattern is arranged on some definite scheme (*e.g.* in parallel bands encircling the vessel) or else is confined to the rim or some other part. In the earliest ware shewing burnishing the lines appear to be almost invariably horizontal.

Less common perhaps than continuous or irregular burnishing are patterns made by combinations of lines vertical and horizontal or otherwise varied. Plate cxliv, fig. 8 is a good example from II 30. In one or two cases the flat bottoms of vessels were ornamented on the underside with a cross in a circle, marked by burnished lines shewing up against the dull surface of the ware.

(c) *Moulded* ornament is still sometimes worked with the fingers on the surface of the vessel, as in the earlier period: but as a rule it is formed separately on a narrow "rope" of clay and stuck as a raised band on the part of the vessel to be decorated. The attachment of the band in the First Semitic Period is, as a rule, much firmer than in later periods. In the former it is sometimes difficult to see that the moulding is on a separate piece, except by a careful examination of the fractured edge, in the latter it is often possible to break the moulding away by a sharp tap.

Sometimes the band is quite plain, as in the V-shaped saucer Pl cxlii, fig. 20, or the sherd Pl cxlvi, fig. 5, but more frequently it is ornamented. The rope patterns are still used, but they are modified into a number of conventional forms. The original strands become waves, or the rope becomes a herring-bone. Another common pattern is a series of overlapping scales. This is very frequent on the large spouted bowls, shape (j). When the edges of the scales are straight we get a kind of saw-tooth moulding. In Pl cxlviii, fig. 24 we see the beginning of a type of moulding very characteristic of the Second Semitic Period—a raised band with depressions at intervals made apparently with a finger-tip or the point of a stick.

Moulded ornament sometimes—but not very commonly—takes the form of wavy



or rope-like treatment of the lip of a jar or bowl (Pl. cxlviii, fig. 5). Another type is shewn in fig. 21 on the same Plate. See also Pl. cxlvii, fig. 2, which is the lip of a drab-coloured bowl, with a projecting wavy moulding round the lip. Not infrequently the lip of a vessel is thickened and the thickening ornamentally treated, as in Pl. cxliv, fig. 1. A slighter example is shewn in section in Pl. cxlviii, fig. 22. A little band is sometimes found encircling the lower attachment of a jar-handle, as Pl. cxlix, fig. 10: this is generally found in jar-handles of double strands, as in the example drawn, where the band has the appearance of tying the strands together.

Pl. cxliv, fig. 7, a flat disc of yellowish pottery with four oval ridges on it, is apparently part of a flat dish or tray, the ridges being on the *lower* surface. This specimen may belong to the Second Semitic Period. In Pl. cxliv, fig. 16 is a beaded moulding round the upturned edge of such a tray. This also may be Second Semitic, though it was found on the rock. Occasionally, but not very commonly, there is a cruciform moulding on the bottom of vessels; fig. 312 is a good example. A similar



FIG. 312.—CRUCIFORM MOULDING ON BASE OF A VESSEL

ornament appears on the bases of Bronze Age pottery from various parts of Europe. The large thick sherd with moulded edge (Pl. cxlvi, fig. 15) is possibly part of a baking-oven. The gently reeded sherd Pl. cxlii, fig. 19 is most probably Second Semitic.

Pl. cl, figs. 16, 18, 19 are various forms of wave or scale moulding; fig. 20 a curious degeneration of the rope moulding, which has become a series of disconnected oblique rectangular bosses. Rows of knobs are a not infrequent ornament in this period: the most striking example is the spiral of knobs in the tray shewn in Vol. I, fig. 50 (p. 149). Two knobs (? intended to suggest female breasts) appear on the vessel shewn, *post*, fig. 316, no. 21.

Figure modelling is rare: the spout Pl. cxlvii, fig. 15 is therefore of some interest. It has a small figure (? a bird's head) supporting it like a bracket. There is one aperture to the spout at the outer end, two at the inner. The vessel was in drab ware. An animal figure was sometimes (but rarely) used as the handle of a vessel: such is fig. 313, found just outside the entrance to the Crematorium.

(d) *Incised*.—Incised ornament is now as important as moulded, and requires to be separately considered. Though discontinuous strokes, the representation of strand-impressions, are still used, continuous incised ornament is now introduced. Thus we have sometimes a herring-bone pattern—a horizontal line with small branches running off the sides which may be vertical or oblique, like the cross-strokes of a T or a Y respectively. This is an especially common device for ornamenting the backs of loop-handles, the central groove running in this case vertically down the middle of the back of the handle. Pl. cl, fig. 21 is a good example. another will be found in Pl. xvi, fig. 9. Often the side bars are absent, leaving only the central grooves, as Pl. cxlviii, fig. 4; Pl. cxlix, fig. 11. Sometimes the incisions are grouped in an irregular or random manner, as in the three examples Pl. cxliv, figs. 9, 10, 11. All these three were found together in II 30; Pl. cxlviii, fig. 9 is another example. In Pl. cxliv, fig. 13 a sherd of a vessel is shewn on which a zigzag line has been traced with the end of a stick. The surface of the vessel was covered with combing.

We have already seen *finger-prints* sometimes used as a decoration of ledge-handles. In Pl. cxlviii, fig. 8 is a sherd of the lip of a large bowl, with finger-prints




FIG 313—HANDLE IN FORM OF AN ANIMAL

impressed at intervals along its inner edge. Fig. 25 is similar, but in this the impressions are made on the outer edge, are close together, and are made with the tip of a knife or some such instrument. Again, Pl. cxlii, fig. 15 shews a fragment of a V-shaped saucer in drab ware, in which there appears to have been a finger-print impressed across every quadrant of the rim.

On Plate cl will be seen a variety of examples of incised ware, all from specimens found on the rock in various parts of the mound. Figs. 1, 2 shew short vertical strokes, figs. 4, 5 shew them oblique (in different directions). In fig. 7 two rows of parallel oblique strokes are to be seen, while in figs. 3, 8 the strokes are alternated, which easily produces herring-bones, as fig. 6, or zigzags as in fig. 13. In fig. 9 we have two rows of oblique lines, one of them on the lip of the vessel, the other on a small rope-moulding encircling the base of its neck (compare Pl. cxlviii, fig. 15). Figs. 10, 11, 12,\* and 17 shew such decoration as we have just seen on the sides of vessels applied to the ornamentation of rope-mouldings; fig. 17 leads to the herring-bone pattern; fig. 14, (which Pl. cxlviii, fig. 16 resembles), and fig. 15, with finer cuts in the edge, are varieties; with the last compare the more regular example

\* Fig. 12 is not, as might appear from the diagram, a perfect saucer, but the bottom of a larger vessel.

Pl. cxlvii, fig. 17. Pl. cl, fig. 13 is a rudely made zigzag ornament on a rope moulding.

The inside surface of the edge of bowls of shape (*k*) in cream-ware is almost invariably ornamented with a band of incised ornament of this pattern  as in Pl. cxli, figs. 1, 12. Such vessels, imitated in stone (ornament and all) are often found; in many cases a stone bowl with its pottery exemplar were discovered in one and the same group.

Not infrequently the incision consists of a simple ring or series of rings, surrounding the vessel, without ornament of any kind.

Other combinations of strokes are frequently used. Very often groups of vertical scores, sometimes interrupted by horizontal gaps or projecting bands, decorate the handles of jars. (For illustrations see Pl. cxlvi, fig. 14, Pl. cxlvii, fig. 16, Pl. cxlviii, fig. 1.) A more artistic but less common form consists of zigzag lines (Pl. cxlviii, fig. 6). In Pl. cxlviii, fig. 20 is the expansion below the lower attachment of a jar-handle, with a triangle of nicks decorating the three edges. Unhappily the handle itself is lost, but probably the nicks were continued as a herring-bone up its edges.

Besides strokes, dots are sometimes used for ornamental devices. On the upper surface of ledge- and other handles—*e.g.* a loop-handle found in a deep pit dug outside the city wall north of the High Place—triangles and V's of dots are sometimes to be found: \* on ledge-handles, however, only when these are quite plain, *i.e.* without ornamental waves (Pl. cxlix, fig. 2). Sometimes quite a large number of dots are found grouped together forming a *semle*, without definite pattern, at the top of loop-handles of vessels: see for example Pl. cxlix, figs. 7, 15: the latter example may possibly be a potter's mark. On Pl. cxlviii, figs. 17, 18 are dots running wholly or partly down the back of loop-handles: Pl. cxlix, fig. 14 has two dots. Note also in this connexion the ornament on Pl. xix, fig. 9.

The rows of perforations cutting diagonally through the inner angle of the moulded rim of a bowl in brownish ware (Pl. cxlvii, fig. 23) is unique. It comes from II 12.

(*e*) *Coloured*.—Drip-lines are still imitated in red or black paint, but they are much more regular and tend to fall into ornamental groups of parallel strokes, sometimes oblique and alternating in direction. A fret of oblique lines, forming a more or less close network on the surface of the vessel, is also a common form of decoration. As before, a dark brick-red, tending to black, is the colour always adopted.


Zigzag lines now begin to make their appearance, and are used either by themselves or in combination with the straight lines. Pl. cxlv, fig. 6, in which the decoration is in red lines on a buff ground, is an example.

Sometimes, but less commonly, the painted ornament takes the shape of dabs of colour, of irregular outline, applied at random to the surface of the vessel.

Single rings, with or without feathering, are found not infrequently, as in Pl. cxli, figs. 5, 7.

The cream-ware vessels are often decorated with an oily dark brownish-red colour, which is sometimes washed over the whole surface, inside and out, or applied in patterns to various parts of it. There is most frequently a band round the rim of

\* Such arrangements of dots may possibly be potters' marks.

saucers and bowls. In jugs of shape (d) these are daubs of red, resembling wings, emphasising the handle, and rings with various kinds of herring-bone treatment surrounding the sides: Pl. cxli, fig. 5 is a good example. The pattern  forms a frequent motive in cream-ware pottery, and specimens shewing its possible variants will be seen in Pl. cxli, figs 5, 13.

The coloured patterns described above are developments or elaborations of the primitive pattern of the Pre-Semitic potters: but there was one scheme entirely characteristic of the First Semitic ware. This consisted of covering the whole, or a large part, of a vessel with horizontal bands of colour, alternately, red, greyish black, and opaque white. Pl. cxl, fig. 4, 6 give a good idea of the appearance of sherds so decorated. Frequent zigzags, parallel with the bands, diversify the pattern; usually painted on the broader bands in a different colour. This style lasted into the Second Semitic Period, but was then displaced entirely by the novel ideas introduced from the Aegean centres. An effective variety was found in a few cases where the alternate bands consist of dark and light shades of the same colour, gradually merging into one another. Pl. cxl, fig. 2 is a good example.

Pl. cxlvi, figs. 1-3 are further examples of this style of colour decoration. In the first of these the background is the fat white slip with which the whole vessel is covered: the broad bands and the zigzags are in bluish black, the narrow bands in red. In the second the background is brown; the zigzag and broad bands flanking it are black, and there is a red band outside each black band. In the third the zigzag and broad bands are again black, the zigzag being on a light Vandyke brown ground; the other interspace on the fragment is coloured red. There is a large number of possible combinations in this simple form of decoration, but they all have a close family resemblance.

Contrary to what might perhaps be expected, the red colour used is more opaque than the black, and completely hides it whenever it overlaps or crosses it. *This is generally true throughout the whole history of painted ware.*

Pl. cxlix, fig. 24 is probably Second Semitic, though the pattern—parallel lines enclosing rows of dots—is not common in either period. The colour is black on a yellow ground.

The combination of colour with burnishing, which is common in the Fourth Semitic Period, is distinctly rare in the First.

In a sherd found in the early cistern at the north end of trench 10 was a fragment shewing a rare form of ornament that may be called *pattern-burnishing*. The clay was of the quartz grit, burning to a Vandyke brown. The vessel had been a bowl, the inner surface of which was a Venetian red colour, penetrating about 2 mm. into the body of the sherd, the thickness of the whole being 1·2 centimetres. This Venetian red colour also covered the surface of the rim, as well as a slight moulding at the top of the outer surface, below the moulding the vessel was of the same Vandyke brown as the heart of the sherd. Evidently some means had been adopted to protect the sherd below the moulding from the intense heat that had coloured the uncovered part.

(vi) **Potters' Marks.**—These are frequent, *especially* on the globular bowls, shape (1): they are usually near the edge of the mouth. They are less commonly

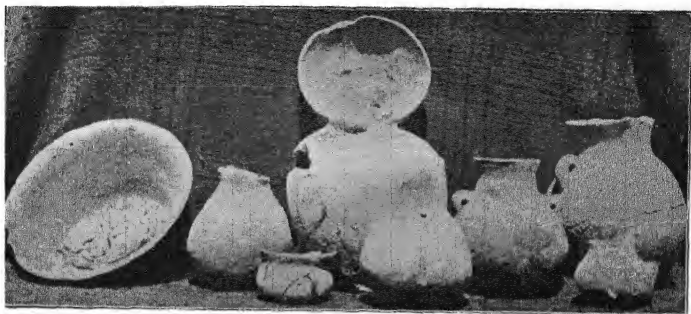


FIG. 314.—POTTERY FROM CAVE 2 I

than in later periods on the backs of jar-handles. These marks all take the form of scratched or prodded devices of a simple kind; stamps or seals are in this period unknown. The devices are the obvious signs that any illiterate person might adopt for "making his mark": as will be seen from the representative specimens drawn on Pl. cxc, figs. 1-19*a*.<sup>\*</sup> See also Pl. cxlvi, fig. 21. I cannot see that it is necessary to suppose that they belong to any formal system of writing or "signary," or that they have anything to do with the origin of the Phoenician alphabet. There are fewer Phoenician-like signs among the Gezer marks than among those from the Shephelah *tells*, for which see *EP*, Pl. 29. Pl. cxc, fig. 7 may possibly be meant for a quadruped. The commonest mark in this as in all subsequent periods is an X of two lines roughly scratched (Pl. cxc, fig. 2). As will be evident by a glance at the Plate, the

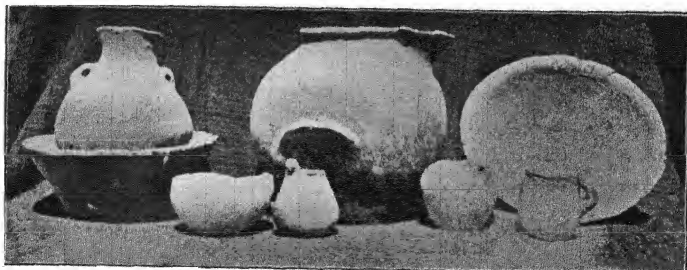


FIG. 315.—POTTERY FROM CAVE 2 I

<sup>\*</sup> Fig. 19*a* is drawn inside fig. 19 to save space: it is, however, a quite independent mark found on the lip of a vessel of shape (*j*).

potters' marks of the First Semitic Period are as a rule in coarser and bolder lines than those of later periods

(vii) **Pottery Groups.**—As such may be indicated, for this period, the collections from cave 3 III (Vol. I, p. 78, and Pl. xvi), cave II II (Vol. I, p. 84, and Pl. xix),\* and tomb 42 (Vol. I, p. 319, and Pl. lxxix). But perhaps the most valuable group of First Semitic pottery, as of Pre-Semitic, was that found in the Crematorium; and it may here be described briefly. The photographs (figs. 314, 315) shew the texture of the ware, while the diagrams (figs 316, 317) illustrate their shapes

Fig. 316 represents the uncoloured vessels: namely (1) A small one-handled cup. (2) A bowl with a minute false handle at one side, quite too small to give a firm grasp even when the bowl is empty. (3) A spherical jug of red ware, burnished, flat bottom, two plain ledge-handles (three small dots, perhaps a potter's mark, are punched on one of these), a circular mouth, and a strainer cup, obviously meant for filtering the liquid while being poured *into* the vessel—the position forbids us to regard it as a spout for pouring *out* (4) A flat-bottomed two-handled jug of red ware, burnished. (5, 6) Two small saucers; one with rounded base and concave

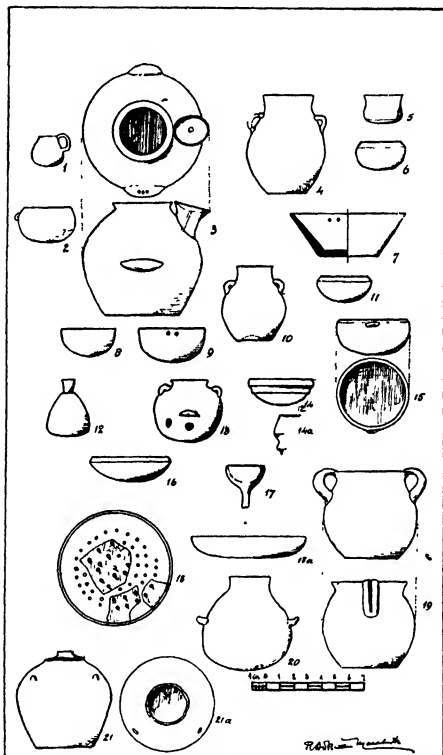


FIG 316—POTTERY FROM CAVE 21

sides, the other hemispherical with a chamfered edge. (7) A bowl with straight oblique sides; just inside the rim are two small dots impressed, which do not penetrate the

\* This ware, though called "Troglodyte" in Vol. I, approximates rather more to First Semitic.

sides of the vessel. Two similar bowls were found with the dots penetrating right through. (8, 9) Two out of a large number (some fifty) of hemispherical saucers, rudely hand-modelled. Fig. 9 has dots penetrating through the side, as in the bowls

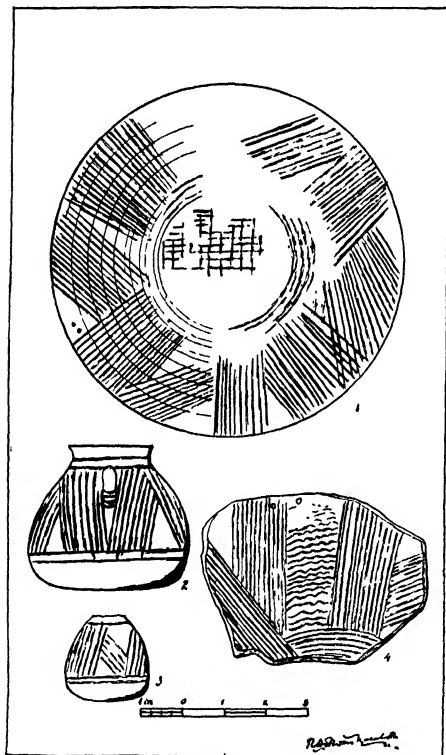


FIG 317—POTTERY FROM CAVE 2I

just mentioned. (10) A jug similar to no 4, but with a concave base. (11) A saucer identical with no. 6. (12) A conical jug of drab ware, with slightly expanding neck. (13) A globular jug with wide mouth and flattish base: there are two ledge-handles and also two ear-handles. The two holes punched near the base have apparently been made with intention. (14) A saucer with a heavy moulding round the mouth, drawn to a larger scale on the plate, below the figure (15) A bowl which, like no. 2, has a minute handle at one side, too small to be of any practical value (16) A saucer resembling nos. 6, 11, but of rather superior manufacture (17) A curious hemispherical cup on a solid cylindrical base (18) Fragments of a tray, studded on its upper surface with little knobs arranged in a spiral\* (19) A globular vessel with flat base and wide mouth: there are two handles, deeply grooved down the back. (20) An ordinary jug with plain ledge-handles. (21) A vessel that has lost its neck and mouth. Round the

\* After this figure had been drawn and despatched to London it was found that the three fragments fitted together, and were not disconnected, as there shewn. The correct restoration will be found in the photograph Vol. I, p 149, fig. 50.

base of the neck was a rope-work moulded collar. On one side are two mammillary projections.

The vessels on fig. 317 are decorated with colour. Nos. 1, 4 are bowls similar to fig. 316, no. 7; no. 1 has the same perforations in the edge as attracted our attention in the uncoloured prototype. No 4 is a fragment merely. Nos 2 and 3 are small jugs with rounded bases and conical bodies. All these vessels are decorated on the *inside* with lines, frets and zigzags, arranged as shewn in the drawings, in dark Indian red: the outside is plain. The ware of the whole series is as a whole of a Venetian red colour, rather gritty, and is apt to crumble under the fingers like a biscuit. A few are of a harder and more homogeneous variety. At the mouth of the cave was found the animal figure fig. 313, which had been the handle of a jar.

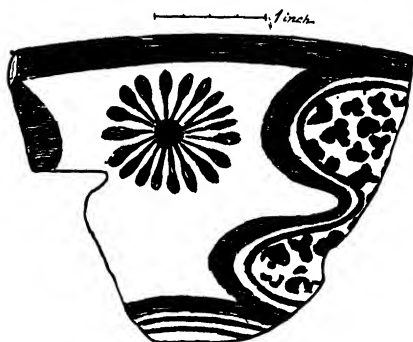


FIG. 318—FRAGMENT OF CRETAN WARE

#### C.—THE SECOND SEMITIC PERIOD

(i) **Foreign Imports.**—In the Second Semitic Period begins the active trade with foreign civilisations, which so profoundly affected the pottery of all the subsequent periods.

No pottery of Cretan origin older than the Late Minoan Periods was found. The earliest, and one of the best, is the fragment found near the Palace in II 28, and shewn in fig. 318. Very large numbers were found of sherds of the "Mycenaean" or "Aegean" pottery (Late Minoan II), testifying to extensive trade in decorative vessels. Most of these were in fragments, typical specimens of which will be found in Plate cli.

These are for the greater part painted in dark reddish brown on the familiar glazed dark buff slip. It is instructive to compare these types, fragmentary though they be, with the local attempts at imitating them in this and the following period. The handsome pot, for example, with interlocking spirals (Pl cli, fig. 9), is evidently the



model for such a poor performance as the vessel Pl. clxiii, fig. 4 Fig. 14 is a small vessel found in the Water-passage—the only perfect example not discovered in the tombs Fig. 21 is the base of a lentoid vessel, seen from below Most of these vessels probably came into the country by way of Cyprus, their nearest possible source A number of perfect specimens of good Aegean pottery were found in the tombs, but rather in Third Semitic than in Second Semitic. See for example Plates lxvi, lxxi

Also from Cyprus came large numbers of hemispherical milk-bowls with "wish-bone" handles and other vessels, decorated with the characteristic "ladder pattern" in black or dark brown,\* on a purple, yellow, or white slip. This decoration was sometimes imitated locally, not without success; save that the potter could not reproduce the slip, but simply painted the pattern on the light brown surface of his own ware. Pl. cxl, figs 12, 13, 15 are typical specimens of the imported ware Pl cxl, fig 14 is a local imitation. This style had a long range, extending into the Fourth Semitic Period



FIG 319—  
HANDLE OF  
VESSEL OF  
CYPRIOTE  
WARE WITH  
FIGURE OF A  
SNAKE MOULDED ON IT

Cyprus further yielded numbers of small jugs with ring-base, inverted conical body, abrupt shoulders, and a cylindrical neck, which in nearly every case had fallen crooked in firing These vessels are found in Egyptian tombs from about 1400 to about 1000 B.C., and they have precisely the same range in Palestine. They always bear a purplish-grey slip, on which a pattern, either of vertical lines or of basket-work, is usually painted in white A similar basket-work is painted on the handles These are generally shapely, flat in section, and pointed at the ends so that they are thrust through the sides of the vessel at the attachments Pl. clii, fig. 9 shows the typical painted ornament on such handles as these. In this specimen the lines are dark Indian red on a yellow ground A good selection of representative types will be seen in Pl lxvii, fig. 1.

Several very small fragments of open-work vessels in the same ware were found (like the so-called "incense-cups" of Bronze Age graves), but nothing considerable.

A fragment of a handle, apparently of this Cypriot ware, was found near the rock, at the northern end of trench 2, remarkable for the representation of a snake moulded upon it (fig 319)

Egypt yielded small vases with a narrow button or knob at the base, conical body tapering below to a point, abrupt, almost flat shoulders, and very narrow concave neck, a single loop-handle, usually composed of two strands of pottery side by side, and adhering together along their whole length The ware is of a black colour, and is decorated with patterns of incised lines and dots filled with white. Pl. clii, fig 10 is a good specimen The shape, though perhaps not the decoration, was extensively imitated locally. These vessels have been found in Egypt associated with 12th and 13th Dynasty scarabs—that is to say, much about the same time as the Second Semitic Period. A fragment with a triple loop-handle

\* In a few rare cases with a greenish tinge in the brown.

appears on Pl. cxlix, fig. 12; and fig. 27 on the same plate is a good example of the type of decoration.

Egypt also exported bowls or saucers of faience, green-enamelled, with lotos or other decoration in brown lines; but (probably from an inability to reproduce the glaze) these always remained exotic and were never imitated locally. See Plate ccxi.

(ii) **Technical Processes.**—Much greater care was taken in refining the clay, in smoothing the surface of the ware, and, generally, in giving a workmanlike appearance to the vessel, than in the previous periods

In the course of this period, no doubt owing to foreign intercourse, the improved potter's wheel, worked with the foot, was introduced. This left both hands free for the manipulation of the clay. When the use of the new machine first began, the potter used either foot indifferently, so that we find that during this period the direction of rotation varies, clockwise or counter-clockwise. Later the use of the left foot became invariable, so that the counter-clockwise direction became once more stereotyped.

The potters were not always completely successful in their work. Many examples of air-bubbles were found, making a swelling in the outer or inner surface of the pottery. In a few cases the side of a jar shewed a depression, probably due to its having been too tightly packed beside another in the oven. A few examples were found of total failures—vessels which had collapsed into a shapeless heap in the oven. It is useless to speculate how a small lump of bronze, about the size of a child's marble, became firmly embedded in the lower attachment of a jar-handle belonging to this period.

It is at first sight difficult to understand why the potters of the Second Semitic Period substituted a rounded bottom for the flat bases of the jars of their predecessors. It might be thought that convenience was entirely on the side of the latter vessels with flat bases will stand of themselves, those with round bases require artificial support. But both to manufacturer and to owner the round base has certain compensating advantages which a flat base lacks.

In the first place, it is evident that the potters had discovered the convenience of making vessels—especially those of large size—in separate pieces, and not all at once: and thus we find that the upper and lower halves of all large jars, and of most small jugs, were modelled independently and afterwards pieced together. The line of junction is usually just at the greatest horizontal width of the vessel. It is often marked by a groove, inside or outside, and is generally a weak place where the vessel has a tendency to break. The lower half would be modelled upside-down on the wheel (no doubt, as the absence of rings inside the vessel shews, on a solid core) and a conical or rounded end would in such a case be evidently much easier to make than a flat end.

In the second place, a large water-pot with a rounded base is more easily canted than one with a flat bottom. It can often be propped at a conveniently oblique angle for drawing water from it: and in the case of wide-mouthed vessels, emptied by *dipping*, the water, wine, or grain at the bottom can be more easily baled out when the store is getting low, when it is concentrated in the bottom of a round-based vessel, than if spread out in a receptacle with a flat base.

Notwithstanding the almost universal use of the potter's wheel, some specimens of hand-made ware came to light, very roughly modelled. Both jugs and saucers were found, all small, and some quite minute. Specimens will be seen in Pl. clui, figs. 1-4. As before, these rudely modelled vessels are probably toys. Another "rough and ready" device for shaping vessels, by trimming them down with a knife, was exemplified in a few vessels found in this period. Pl. clui, fig. 5 is a good specimen of a small jug so made. Even wheel-made vessels were sometimes trimmed in this manner, though naturally those modelled by the hand show its traces more frequently. The roughly made neck of a large vessel Pl. clxix, fig. 16 is another good example of this process. The curious little jug Pl. cxlvi, fig. 16*a* is an unusual example of a hand-modelled vessel with a large handle stuck on (now lost). Some examples were found in this period of vessels that had got broken which were repaired by means of thongs, the corresponding holes for which remained.

Paint was applied to vessels, as a rule, by means of a brush, as the marks left by straggling hairs were occasionally to be seen: and in V 20 a cake of blue paint was found with evident traces of the friction of the brush upon it. But in one case (from the Third Semitic stratum) a fragment was found which was decorated with a fret of red lines that were distinctly sunk below the surface of the pottery and slightly burnished. This would seem to shew that the paint was sometimes applied by means of some form of coloured pencil.

(iii) **Ware.**—There is a great variety of ware in the Second Semitic Period

(a) The majority of the large domestic utensils of the commoner types are made of a rough clay, full of fine grits of black-coloured sand and flint, burning black in the middle of the section and a reddish or yellowish drab on the surface. The outer surface is sometimes rather lighter than the inner.

(b) Another, rather finer ware is of a much more homogeneous black clay, though with frequent particles of limestone or quartz.

(c) Ornamental jugs of shape (*g*) are made of a close-grained ware, very thickly scattered with minute specks of limestone, black in the middle and reddish brown in the sides of the section. The surface is almost always covered with a cream slip.

(d) There is also a very fine, but not wholly compact red sandy clay, which when examined with a magnifying glass shews a large number of minute charcoal-like specks. This is of a reddish yellow colour in the middle of the section, reddish brown outside but it is sometimes found burnt black in the middle and reddish brown towards the surface.

(e) A lighter-coloured ware, more compact than the last, with minute quartz and sandstone particles. It is used for large ornamental bowls.

(f) A Venetian red clay, very compact, and almost homogeneous except for minute limestone particles sparsely scattered through it. This is always covered with a flat dark red slip, highly burnished, and is used for the most ornamental forms of vessels.

(g) A rare type of ware is of a light olive-green colour, with minute limestone particles in it. A few very fine and delicate sherds, almost as thin and compact as pieces of ostrich-egg shell, were found, but no whole vessels.

(h) A number of small ornamental vessels, probably of foreign origin, are made

of a brilliant saffron-yellow clay, with the section the same colour as the outer surface (a very rare circumstance) and enriched with painted decoration in bold black lines. The *askos* Pl. cxxvi, fig. 22 is in this ware, as is the spouted cup Pl. cxlv, fig. 5. The appearance of the ware is shewn in the coloured drawing Pl. cxl, fig. 9.

(iv) **Shapes**: (a) Jars with pointed base, long conical body, well-rounded shoulders, short concave neck, continuous circular mouth with lip expanding, though not nearly so widely as in the previous periods. Ledge-handles never used; often the vessel has

no handles, but there are generally two (in a few cases four) loop-handles. A good typical example without handles is shewn in fig. 320; this vessel was found full of grain. In Pl. clii, fig. 1 is shewn the mouth of such a jar, with the lip concave on the side towards the mouth.

(b) Large jars resembling type (a) but with two *transverse* loop-handles on the shoulder. This was very rare: only two were found, both in fragments. One was in cave 27 I (see Pl. xxix, fig. 1), associated with Early Middle Kingdom scarabs, the other just above the rock at the south end of trench 29. It is thus a very early type, and probably belongs partly to the First Semitic Period.

(c) *Jugs* with conical body which may taper to a point, as in Pl. clvi, fig. 2, or be cut off flat, as in fig. 1 in the same Plate; abrupt shoulders, curving in to a long, slightly convex neck; continuous mouth; two loop-handles, usually rather more of a horizontal oval than is customary in the loop-handles of this period. The two just mentioned are typical examples of this kind of vessel: the first is ochreous brown ware slightly burnished, with two red rings surrounding the shoulders; the second, which has lost its handles, is in lightish brown



FIG. 320.—SECOND SEMITIC JAR

ware. Figs. 10, 16—the latter hand-modelled—are coarsely made specimens of the same type. Both of these are in black-coloured ware. Fig. 13 is of similar type, differing, however, in having only one handle, standing vertically up from the shoulder, instead of the usual two, and also in its superior size, this vessel being no less than 2' 8" high. Another variant, in which the shoulders are more abrupt and the handles are ear-handles at the base of the neck, will be seen in Pl. clvi, fig. 20.

(d) Jugs with pointed base, long conical body, round shoulders, narrow concave neck, which is often oval in horizontal section almost throughout, oval spouted mouth,

generally of graceful form, one loop-handle on the side opposite the spout. These vessels are the commonest type of pottery found at Gezer, and they persist through all the subsequent periods, though with modifications of detail. They range in length from two or three inches to about a foot. The large specimens have often a flattened disc, about the size of a penny, at the end of the base. Both kinds are shewn in the photograph, fig. 321. The pointed base of a broken specimen was found which had a pellet of pottery adhering to the middle of its upper surface (Pl. cliv, fig. 5). It is probable that this was merely some effect of the rotation of the vessel on the wheel. Pl. cliii, fig. 18, which has lost its neck and handle, is an early anticipation of the degenerated form this vessel finally assumed, with a flattened stumpy base. The rude vessel fig. 19, on the same plate, is a roughly modelled specimen of this type.

(e) Jugs with pointed base ending in a knob or small disc too narrow to support

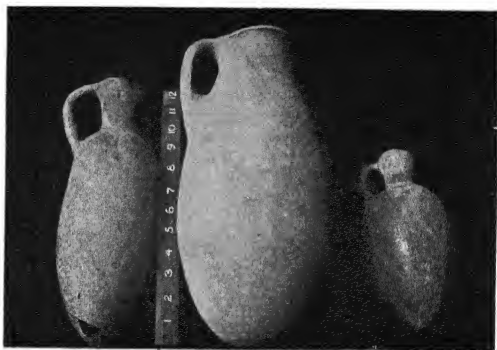


FIG. 321. -SECOND SEMITIC JUGS

the vessel, inverted conical body, flat shoulders, very narrow neck, and widely expanding mouth. One loop-handle of two strands. These, as already mentioned, are imitations of an Egyptian model. They are always highly finished, and evidently were prized as ware of a superior type. I doubt whether any of the examples that display the punctured ornament (alluded to already in the paragraph on foreign importations) are of native manufacture. Pl. cxlii, fig. 6 is a good example: fig. 10 is similar and decorated with painted lines: a variety is fig. 16, which is more squat and has the handle attached differently. Sometimes the basal knob is absent, the cone of the body being then sharply pointed. Pl. cxlii, fig. 9 is a sherd of an unusually small specimen: compare Pl. cliii, fig. 15. In Pl. cliv, fig. 29—a mere fragment—the ware is burnished yellow and there are four vertical red lines painted upon it. It is not very often that vessels of this type have coloured ornamentation upon them. Further specimens will be seen in Pl. cliii, figs. 6–10. Fig. 6 has three red lines

taking the place of the punctured decoration found in the Egyptian specimens Fig. 7 is a clumsy local imitation in whitish ware. The drawing is a restoration from a fragment which alone had been preserved. Fig. 8, which is in black ware, shews a belt of punctured ornament round the side. the handle is grooved, to imitate a double strand. Fig. 9, which has lost neck and handle, is in burnished drab ware. The punctured ornament is here confined to the top surface. Fig. 10, undoubtedly an importation, is in smooth black ware: the incisions and dots are as usual filled with white. Fig. 17 is a variant in which the neck is wide and the body less wide in proportion to its height. the base also is broader, so that the taper is not so pronounced. The double-strand handle is, however, retained, indicating the parentage of the vessel.

(f) Jugs with disc- or button-base, globular body, cylindrical neck, one loop-handle, covered with a warm brownish-yellow slip with painted lines and zigzags in dark red or black. This is a very superior type of ware, certainly of foreign origin, and it is very common just at the beginning of the period. Pl. cxlv, figs. 1, 2, 3, 4, are specimens of the vessels and the way in which they are decorated. Pl. clvii, fig 4 is a variant, in which the handle, which has broken out of the attachments, was entirely on the body of the vessel. Pl. cliii, figs 12-14 appear to be local variants founded on this type. Fig 12 is one of a group which consisted of two large jars, shapes (a), and two vessels of this type: inside one of the jars was one of the ordinary pointed-bottomed jugs, and between them was another. The ware is light drab. There were three red lines surrounding the broadest part of the fellow of the vessel drawn. Fig. 13 is coarse drab ware, shewing traces of a red slip. Fig. 14, which is late in the period, is of light drab ware. Pl. clii, fig 8 seems to be the neck of a large vessel of this kind, but without the characteristic colouring.

(g) Jugs on a hollow base like the bell of a trumpet, oval body, wide circular neck, wide continuous mouth with flat expanding lip, no handle. Pl. clii, fig. 17 is a good example, though the ware is more coarse than usual. as a rule vessels of this type are well made, and have a cream slip upon them. Pl. cliv, fig. 14 is a rather ungraceful variant, though it approximates to the Cypriote vessels in point of fineness of ware. Pl clvi, fig 9 is the upper part of the foot of a similar vessel with a roll moulding surrounding it. At the bottom of the receptacle of vessels of this kind there is often a small hollow. This is shewn in the fragment Pl. cliv, fig. 16: it is indicated by the word "hollow."

(h) Jugs with flat base, body gradually expanding and then contracting, wide neck, round or spouted mouth, one loop-handle. See Pl. cliii, fig. 21 for the normal type; but there are a number of variations. Pl. clvi, fig. 3 is of the same class, but differs in the treatment of the neck. Pl. cxlvi, fig. 7 is something similar to this, but has two minute loop-handles: it is probably just from the border-line between the First and Second Semitic Period. Pl. clvi, fig 11 is more like this type than any other, but probably it is a later vessel suggested by the Cypriote vases of the end of the Third Semitic Period. A variant with a very wide mouth appears in Pl. clvi, fig 12. Pl clvi, fig. 15 has a curious ornamental knob projecting from each side. Fig 19 in the same plate is a rude specimen, which has almost completely lost the characteristic swelling form. There is a hole in the middle of the base of this vessel, which, however, is probably the result of an accident.

(*g*) Cylindrical pots: with flat bases (almost always slightly convex), cylindrical body, flat shoulders, and narrow neck (fig. 322). One loop-handle. As we saw from Pl. cxliii, fig. 15, this form begins to appear in the First Semitic Period. Pl. cliii, fig. 11 is a small example of unusual proportions. Fig. 16 in the same plate is a variant, lengthened, with the body made conical.

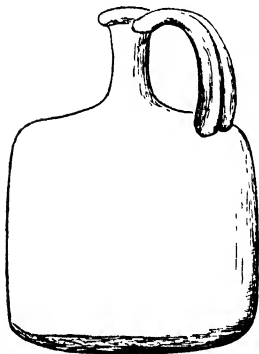


FIG 322—CYLINDRICAL JUG, SECOND SEMITIC PERIOD

(*j*) Lentoid vessels or "pilgrim-bottles"—the body composed of two broad shallow bowls placed rim to rim, a long, slightly concave neck rises from the line of junction, with two loop-handles in the angle: mouth generally slightly moulded. Though introduced in this period, this type of vessel is not at first so common as it becomes in later periods. Sometimes, as in Pl. clvi, fig. 6, the neck almost disappears and the handles become attenuated to mere perforations for suspension.

(*k*) Flat vessels, broader than their height, body almost an ellipse in vertical section (or else cylindrical with rounded base and flat or rounded shoulders). Wide concave neck, continuous circular mouth; two ear-handles on shoulder. A good specimen of this type of vessel is Pl. cxliii, fig. 7. Pl. clvi, fig. 8 is a variant of the type

(*l*) Conical vase with rounded base and flat mouth, no handle. A good specimen is Pl. cxliii, fig. 8, in polished red ware. This form is evidently suggested by a common form of alabaster or porcelain vase imported from Egypt. A variety with flat base appears in Pl. clvi, fig. 4. Fig. 5 on the same Plate is another variety with two small ear-handles, and fig. 24 on the same Plate has two *transverse* ear-handles. It is in compact red ware. In Pl. clvi, fig. 17 the mouth is wider than in the majority of vessels of this kind, and the side is decorated with a fret (much defaced) of red lines. It is hand-modelled. The top of a vessel shewn in fig. 323 is a rare form. The mouth is very narrow in proportion to the size of the vessel, and there is practically no neck. The body seems to have been more or less cylindrical, but only two specimens were found, both equally imperfect.

(*m*) Small cups, with flat base and vertical sides; horizontal section, almost uniform throughout. These vessels are not very common. A slightly barrel-shaped example appears in Pl. cliii, fig. 20, and a cylindrical specimen is Pl. cliv, fig. 15. These are both hand-made. There is a finger smear across the base of the second. A broken specimen, likewise hand-modelled, is seen in Pl. clii, fig. 10. The clumsy hand-made vessel Pl. clvi, fig. 14 is probably to be reckoned in this class. Pl. clvi, fig. 18, is similar to the last



FIG 323—SECOND SEMITIC JUG OF UNUSUAL FORM

Though not hand-modelled, and with slightly convex base, the saucer Pl. clvi fig. 25 belongs essentially to this class; as also does Pl. cliv, figs 10, 20. Pl. cliv, fig. 22 is a variety mounted on a disc-base. The globular vessel Pl. cliv, fig. 8 may best be described as a combination of type (*l*) and type (*m*).

(*n*) Bowls, on disc-bases, lower part of body flat and widely expanding, upper part shaped like a pulley-wheel. This is the commonest type of bowl or saucer, and persists throughout the subsequent periods. There is a considerable variety of size and detail. In some, the upper part of the side of the vessel is straight, expanding outward like the sides of a V. Pl. cliv, fig 12 is an example, found in cave 17 IV. Fig 19 shews a small specimen with a different proportion between the parts of the moulding. Pl. clui, fig 22 is a variant, with a flat or slightly convex base instead of the ordinary disc-base. It is in coarse porous drab ware. In the fragment, Pl. clv, fig. 3 it appears that there were one or two small handles spanning the hollow upper part of the bowl. This is very uncommon. In Pl. cli, fig 21 the hollowing of the upper part of the side is absent.

(*o*) Large bowls on disc-bases (usually hollow disc), sides at first oblique but



FIG 324—ORNAMENTAL BOWL, SECOND SEMITIC PERIOD

gradually becoming vertical. A slight moulding round the lip. Two transverse loop-handles on the vertical part of the sides, these are bent upwards, sometimes so much so as to adhere to the pot along their whole length. The upper part of the side is always elaborately decorated with painted ornament, a frieze being marked out by painted rings in black and red, one group being just under the rim, and above the handles, the other being on the place where the vessel reaches its greatest prominence. This space is divided by vertical groups of lines into metopes, and each of these contains some ornamental device. Pl. cxl, figs 10, 11 illustrate the geometrical patterns employed. The design of these vessels is of Mycenaean origin. Fig 324 represents the upper part of a variant form, with loop-handles. It is decorated with alternate birds and fishes.

(*p*) Footed bowls, which resemble the saucers (*k*), but with a downward projection resembling the bell of a trumpet taking the place of the disc-base. Like (*j*) these vessels are not so common in the Second Semitic as in later periods. Pl. cliv, fig. 18 is a fragmentary example in rough drab ware. Some of these vessels are shallow, and from their being so frequently associated with lamps it is not unlikely that these were stands for their support. But this explanation will hardly suit the vessel fig. 325,



found in fragments in III 28. It was 6" high, and from its shape is evidently some kind of drinking-cup

(g) A good many minute saucers came from this period, probably they were for cosmetics or some such purpose: it would be difficult to explain otherwise such a vessel as Pl cliii, fig 24, which is only 2" in diameter. Different shapes, with concave, convex, and cyma-shaped sides are to be seen in Pl cliii, figs 24-26 (the last being one of two that were found together) and Pl cliv, fig 17. The last vessel is almost solid, there being hardly any depression in the upper surface: the diameter is only 1½" Pl cliv, fig. 24 is another example

(r) Wide shallow bowls and saucers of various kinds and sizes, such as the more or less hemispherical examples without handles, Pl. cliv, figs 1, 2\*; with one handle, fig 4, and with two handles and disc-base, fig 6 on the same Plate; or else

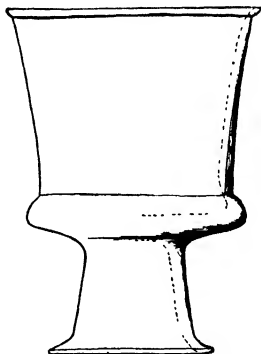


FIG 325.—DRINKING-CUP, SECOND SEMITIC PERIOD

V-shaped bowls with disc-base (figs. 7, 11) and with slightly convex sides (fig 25)· the stone vessel, Pl. cliv, fig. 21, resembles these in type.

(s) The fragment Pl. cliv, fig. 26 is a small section of a very large flat dish (or pot cover?) with upturned brim. So large was it that in the portion of the edge remaining the curvature is hardly perceptible.

(t) Spouted saucers, of which Pl. cxlv, fig 5 is a characteristic sherd, are not infrequently found in the ornamental yellow ware with black lines above described (**Ware**, paragraph (j)) The saucers are small, hemispherical in outline, and probably have a flat or disc base—no perfect example was found. The spout is long, narrow, with very slender base, straight, and inclined obliquely upwards.

\* Fig 1 is a finely made vessel with very sharp rim, red burnished outside and yellow in, fig. 2 is of "porridge" ware with the dull red colour characteristic of the cave pottery, and is certainly an early vessel that has filtered up to the Second Semitic stratum

(u) Baking-trays are flat circular discs of pottery about 9"-1' in diameter, with a slight moulding defining the edge, and with a *semé* of perforations on the under surface. The use of these objects has already been described at p. 43, *ante*. - An example of fragments of such vessels is Pl. clv, fig. 15. Somewhat similar in type, though not perhaps for the same specific purpose, is the curious flat bowl of which a fragment was found, shewn in section in Pl. clv, fig. 21; this is in black ware with a brown surface.

(v) Filters are made by taking a jug, blunt-based, but otherwise of shape (d), and piercing its base with holes. Pl. clvi, fig. 21 is an example.

(w) Lamps first appear in this period. They are shallow saucers, with a spout drawn out at one side of the rim. The base is always rounded and the vessel is plain, without moulding. At first the spout is of very slight projection and triangular

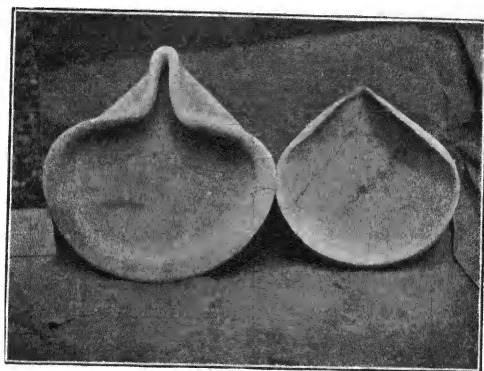


FIG. 326.—LAMPS, SHOWING DEVELOPMENT OF SPOUT

in shape. Fig. 326 shews this well; the contrast between the lamps of this period and the lamps with more developed spouts of later periods is clearly indicated.

(x) A curious type of pottery objects makes its appearance in this period, though it is commoner in the Third Semitic Strata. This is a ring, solid or tubular, with a series of small cups or lamps standing on its upper surface. When the ring is a *tube*, the small cups sometimes communicate with it by a hole, but not always. It is difficult to guess what purpose these may have served. No complete, or even nearly complete, specimens were found belonging to this earlier period: one or two fragments will be seen on the Plates. Such are Pl. cliii, fig. 23, evidently one of the small cups broken from such a series, and Pl. clii, fig. 2, which is unique among this type of object in having a spout in the side. Fig. 5 in the latter Plate seems to be a fragment of the tubular base of a vessel of this kind. Compare also fig. 390 (*post*, p. 238).

(*y*) The "cup-and-saucer" vessels, the purpose of which is not easy to understand, are found in this period, though they more strictly belong to the next. They were not, however, so common in Gezer as they appear to have been at Tell el-Hesi, though they were far more frequent in either place than in the Shephelah mounds. Pl. clii, fig. 18 is a fragmentary example, with a rather unusual outline to the cup, which as a rule is shorter and expands more widely.

(*z*) The two objects Pl. clii, figs. 9, 13 are difficult to explain. They are not improbably small models of shrines. Both are essentially square boxes open at the top and in front, with the base projecting a little before the upright edges of the sides\*. The more elaborate shrine described later in Chapter X (p. 438) may be compared Pl. cxlv, fig. 18, which is a fragment (2½" by 2") of a small stand of pottery with little knobs for feet at the corners, is of much the same class of object. The ornament on the top is incised.

(*a*<sup>1</sup>) There is a type of object found in this stratum that is also difficult to explain; it may be a lamp stand, but there is one detail hard to account for. It is a standing cylindrical tube, expanding into a foot at the bottom, with a moulded top. A perfect specimen is shewn in fig. 327, which belongs, however, to the Third Semitic Period: and fragmentary specimens appear in Pl. clii, figs. 4, 13. Fig. 13 is decorated with three reddish-brown rings, and an oblique white ring. In this example the tube is closed at the end, and just under the end there is a circular hole through the wall of the tube. This is the detail that I cannot explain: it must serve some functional purpose, as it is found in several of these tubes.

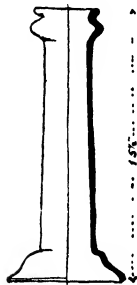


FIG 327—LAMP  
STAND (?)

(*b*<sup>1</sup>) The cyma-shaped bowl, without foot, Pl. clii, fig. 23, is not a very common form of vessel, nor, in this period, is such a vessel as fig. 28 in the same Plate very frequent: it is an anticipation of the cooking-pots of the Hellenistic Period. This specimen is very rudely modelled by hand.

(*c*<sup>1</sup>) An unusual form of double vessel, unique at Gezer, is shown in Pl. clxxii, fig. 19. It consists of two roughly modelled cylindrical tubes, of a coarse drab ware, meeting in a V form.

(*d*<sup>1</sup>) The general use of round-bottomed vessels, that would not remain upright without support, made the introduction of stands a necessity. These were cylindrical, shaped like a pulley-wheel, with moulded rim to the top and bottom. Sometimes perforations were made in the sides—partly no doubt for ornament, but also perhaps for air-holes, as cooking-vessels were sometimes supported on these stands over a fire, one or two specimens having been found blackened by smoke. Pl. xviii, fig. 20 shews a section of such a vessel: see also *EP*, Pl. 45, figs. 11, 15, 20. These stands occur in all the needful sizes and in all periods after the First Semitic, when they appear to be unknown. See also Pl. clii, fig. 5, Pl. clxxxv, fig. 4. One specimen

\* The front edge of the base of fig. 13 is broken, so that originally it projected even farther than is shewn.

was found with a button-handle in the shape of a rough lump on the side. This was the only example that had any form of handle.

(v) **Details:** The *bases* of jars and jugs are nearly always sharply pointed. For bowls the disc-base in its different varieties seems on the whole to be preferred. The ring-base is by no means unknown, but it is not so common as in later periods. In some types, as we have already seen in describing shapes, there is a knob or button on the base. Except in small vessels, the flat base of the early periods disappears almost entirely. Sometimes a vessel that would normally have a pointed base is flattened at the tip: Plate clvi, fig 1 is a good example.

Plate cli, fig 20 is a unique fragment. It evidently is a group of four short feet, the space between which was apparently carried up by flutings on the sides. The ware is of a reddish drab colour.

*Ledge-handles* disappear almost entirely, a few attenuated specimens alone survive to carry on the tradition. Such are the small fragment of a red bowl Pl. cli, fig 16, and the projection from the side of the rim of a bowl fig. 6 in the same Plate. This specimen is covered with a dark red slip. It would be difficult to know whether to describe Pl. clv, fig. 1 as a transverse ear-handle or a perforated ledge-handle. It is strangely like the handles on some large vessels in modern Palestinian pottery. The V-shaped mouldings attached to fig. 11 in this Plate seem also to carry on the tradition, as does the fishtail-shaped fragment, Pl. clii, fig 28 (which will be found at the side of fig. 6). The latter being broken off whatever it was attached to, it is impossible to say how it was finished. It is decorated with grooves.

*Button-handles* are comparatively uncommon, but they occur, sometimes in rather curious forms. They seem on the whole to occur most frequently on *one* side only of a bowl, though sometimes they are on both. In Pl. clvii, fig. 2 is a dicebox-shaped projection from the side of a painted bowl (of which figs 1, 3 are also fragments). There can be little doubt in this case that there was a corresponding projection on the opposite side of the vessel, and that a vertical handle (resembling a modern bucket handle) of string or plaited straw was looped and played upon these knobs. In Pl. clv, fig 7 the commonest form of button-handle is shewn: a less frequent form, with vertical grooves dividing it into compartments is shewn in fig 5 in the same Plate. A form common in this period is shewn in Pl. clvi, fig. 22; it is similar in construction to Pl. cxlviii, fig. 2, which has already been described under the previous period. This can have been of little practical use, and must have been merely an ornament.

*Loop-handles* are the most frequent. The section of the bar of pottery is in the smaller vessels generally circular, in the larger a flat oval with or without a ridge running down the outer surface. This ridge may be abrupt, but more frequently it is not. The outline of the handle is usually graceful, being heart-shaped, or an inverted triangle with rounded angles. There appears a general tendency to keep the sagitta of the arc of the handle short in proportion to the length of its chord. There are, however, exceptions to this, as in the clumsy vessel Pl. clvi, fig 16, where they approximate rather to the horizontal oval of the later periods.

Ornamental treatment of the lower attachment, by projections and bifurcations, is found sometimes, though not often, in this period. Specimens will be seen in

Pl clv, fig. 14, and clvii, fig. 22. The former belongs to a very large drab-coloured jar which seems to be early in the period. The latter is from a drab vessel ornamented with a fat white slip. An unusual form in this period is the angled handle, Pl clvi, fig. 11. Also exceptional is the vertical loop-handle on the shoulder of a vessel, Pl clvi, fig. 13.

Loop-handles formed of two or three strands we saw to have been introduced in the First Semitic Period. These persist into the Second Semitic, as Pl. clv, fig. 4 shews. In the Second (apparently) an elaboration was introduced in which the strands were plaited or twisted together. In Pl. cxlix, fig. 16 there is a twist of three strands. In fig. 17 there are four strands, two of them very small in comparison with the others. Single bars grooved to imitate double strands are still found in this period: in Pl. clii, fig. 27 (beside fig. 5) there is a ring of pottery round the handle at the attachment as though holding this imitation double handle together. This also is a survival from the First Semitic Period.

*Ear-handles*, both vertical and transverse, single and double, are also common in

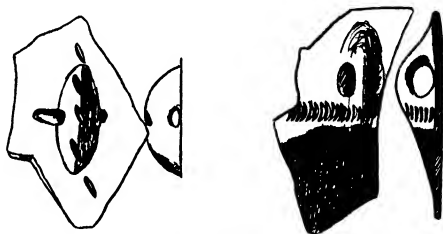


FIG 328—SPECIMENS OF EAR-HANDLES

this period. Fig 328 shews two specimens. The first of these, which is ornamented with a roughly made row of oblique strokes, is almost to be described as a perforated button-handle. The other is more ornamental. The pot is painted red below the handle, and crossing the lower attachment is a row of curved indentations apparently made with the potter's finger-nail. There are some unusual forms; e.g. the vertical ear-handle mounted on the rim of a bowl, Pl. clv, fig. 18. At least as uncommon is the small horizontal loop-handle on the tray, Pl clii, fig. 12—which tray is still more remarkable in being *square*. Ear-handles are common in both bowls (as Pl. cliv, fig. 4) and jugs (as Pl. clvi, figs. 5, 8, 24).

In Plate clvi, fig. 7 is shewn an anomalous vessel. The top is unfortunately broken off, but enough remains to shew that it has had a combination of two handles—a loop and a transverse ear-handle. Such combinations of handles of different kinds are very unusual.

As a glance over the plates will shew, vessels totally without handles are often found.

*Spouts*.—There is not much that need be said about spouts in this period, save

to mention a superior type of saucer, probably of Cypriote ware, with a short spout, elliptical in transverse section. The specimen figured (Pl. clv, fig. 2) is ornamented with vertical burnished lines; as a rule this class of vessel is decorated with dark-red lines on dark greyish-red slip, like the sherd Pl cxi, fig 8.

The *jar-stoppers* shaped like saucers, with two loop-handles in the upper surface, are perhaps commonest in this period, though they are always rather rare Fig 329

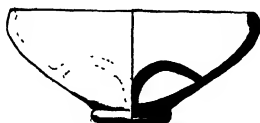


FIG 329—SAUCER-LIKE JAR-STOPPER

shews in section one of the few perfect examples found. Simpler devices for jar-stoppers are fairly common masses of clay, almost always very roughly made of conical or T-shape (the latter resembling the glass stoppers of medicine bottles), or flat discs resembling large biscuits.\* Often a potsherd is secured to the top surface of conical stoppers, apparently to give it a smoother surface. Some specimens of jar-stoppers of this period are shewn in Pl. xcxi, figs 1-5. Fig. 1 is of brick, conical in shape, fig. 2 is of clunch, and fig. 3 of clay. The last is curiously bifurcated below. Fig 19 is also from this stratum. It is designed to fit the *spouted* mouth of a vessel, and is therefore oval in shape. The under surface is covered with finger-prints. Marks of the cord are evident on the upper surface, and the side is chipped as though a seal had been knocked away. Fig. 4 is of black ware. it has a hole through the

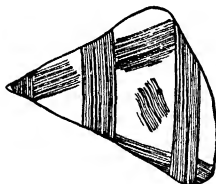


FIG 330—SHERD WITH COMBED ORNAMENT

middle. Fig 5 is another of the perforated oval discs of pottery already mentioned (half only). This specimen has some unintelligible marks on both sides.

(vi) **Ornament** (a) *Combed*—Combed ornament practically disappears in this period, and is only revived in sporadic cases till reintroduced by the modern potters. There are, however, one or two specimens of its survival. A good example is fig. 330

\* A collection of such discs was found together in III 2, and at first interpreted as clay models of cakes, which they much resembled. They are, however, probably simple jar-stoppers

from III 2, where the combing forms a pattern of squares. Pl clii, fig 11 is another example of ornamental combing from this period. the sherd is in light brown ware.

(b) *Burnished* ornament in this reaches its high-water mark. All the most elegant vessels are burnished to a greater or less extent, and the effect of *continuous burnishing*, invented by the First Semitic potters, is improved and brought to perfection in vessels of a beautiful rich red colour. The colour as well as the burnishing is always more uniform than the First Semitic potters succeeded in making it. this gives a curious effect of "machine-made" excellence to the later ware, the absence of which, it must be admitted, lends a certain charm to the work of the earlier period. Continuous burnishing with the lines grouped in different directions is sometimes used, as in Pl. clvi, fig 23, a vessel of a light chrome yellow colour. The margin is of an ochreous colour. An effective play of light is sometimes obtained by cross burnishing, *i.e.* groups of vertical and horizontal lines disposed over the vessel. After the Second Semitic Period burnishing rapidly deteriorates, and continuous burnishing is never applied again.



FIG 331.—ORNAMENTAL SPIRAL BAND ON A JAR-HANDLE

(c) *Moulded* ornament, though it retains the main features of the corresponding decoration of the First Semitic Period, deteriorates both in quantity and in quality. Various specimens will be seen on Pl. clv. Fig 8 shows the rope moulding, rather degenerated. In fig 10 the characteristic form of Second Semitic moulding is illustrated—namely, a raised band attached to the side of the vessel, with the patterns cut or scratched on it with a sharp knife. In this particular case we have a herring-bone pattern. in fig 13 there are V's (as in the neater specimen Pl. clvii, fig. 21), in Pl. clv, fig 15 a criss-cross, and in fig. 22 the debased rope-pattern, reduced to a roll with oblique nicks on it (compare Pl. clvii, fig. 19). Pl. clv, fig. 14 shews another very character-

istic type of Second Semitic moulding; a raised band, with a row of shallow depressions, made apparently with the finger-tip or some similarly shaped blunt instrument. Fig. 19 is curious as being unfinished. Fig. 23 shews a specimen approximating more in type than these to the First Semitic forms. In Pl. clii, fig 8 there is a single roll, with oblique nicks, surrounding the base of the cylindrical neck of a large vessel. Fig 14 on the same Plate shews a curious coarse moulding of triangular-shaped ridges without nicks. In fig. 23 is a sherd of a hemispherical saucer in drab ware,  $4\frac{1}{4}$ " in height and about  $5\frac{1}{2}$ " in diameter, with a similarly un-nicked roll surrounding it. Fig. 24 is somewhat similar, but the moulding is reduced to a small label. A plain band (or more frequently two) frequently runs down the backs and sides of loop-handles. These terminate spirally above and below, as illustrated in fig 331, which shews the upper attachment of such a handle springing from the long neck of a large jug. In Pl. clvii, fig. 23 is a specimen of the disc-base of a vessel, with two moulded strips crossing its centre, at right angles to one another. Fig. 18 in the same Plate shews the unusual feature of *two* rows of diagonal cuts on the band turned in the same direction. Fig. 25 is a heavily moulded specimen, possibly from the edge of a baking-oven.

Another form of moulded decoration is what may be called discontinuous moulding—a series of knobs or pellets of various shapes raised on the surfaces of vessels. A single knob of this kind appears on the small jug Pl. clvi, fig. 15; rows of knobs are to be seen in the sherd of a bowl (Pl. clii, fig. 19) in red burnished ware. This object was found in waste earth, but is no doubt of the Second Semitic Period. Pl. clv, fig. 9, which has been inadvertently attached to this plate, is really in stone: the accident is, however, not wholly to be regretted, as it illustrates the imitation of pottery forms and materials in the more intractable material. Pl. clvii, fig. 24 is a curious example, with small discs on the top of the rim of a vessel combined with nicks on its outer edge.

An unusual form of moulding is shewn in Pl. clvii, fig. 17. This is early in the period, probably being just in the transition stage from First to Second Semitic. The cuts on the band are broad and shallow, being evidently made with a metal knife held very obliquely. There is a perforation drilled through this sherd just where it is fractured. The ware is of a Venetian red colour.

A reeding more or less delicate runs sometimes round the sides (especially at

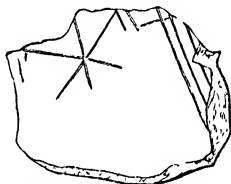


FIG 332—ORNAMENT SCRATCHED ON A POTSDHERD

the most prominent parts) of ornamental bowls. Pl. cxlii, fig. 19 is a good example; it is in bright red burnished ware. A specimen of the similar treatment of the *inside* of a vessel is shewn in Pl. clvii, fig. 20: most of the lines there shewn are, however, painted (dark Indian red), not moulded.

(d) *Incised* ornament, apart from the incisions on the moulded ropes just described, is not so common as moulded. A few sherds with a white slip, bearing a cord or herring-bone moulding incised upon them, are probably to be ascribed to this period. The *scratched* ornament on the sherd fig. 332 [II 2] was evidently made after the vessel to which it belonged had been fired. Probably it was not intended by the potter, but was the work of one of the owner's idle moments. The commonest form of incised moulding is a row of vertical nicks, as in Pl. clvii, fig. 24, or Pl. clv, fig. 16. As these examples shew, the nicks are always on some prominent part of the vessel. Pl. clvi, fig. 3 is, however, an exception. Combinations of grooves or scratches are also found, as in the fragment Pl. clii, fig. 28, to which allusion has already been made: see also Pl. clii, fig. 22, a sherd of drab ware with three oblique scratches, which, however, may be a potter's mark (as the crosses on figs. 3, 7 in the same Plate certainly are); Pl. cliv, fig. 27, a sherd of grey ware painted a brick red on the surface,



with a palm-leaf ornament incised upon it Pl. clvi, fig 26 is a Cypriote jar-handle with short incised lines, instead of the one or two long grooves which are the commonest decoration of these vessels. The large flat bar of pottery Pl. clii, fig 15 is probably part of the handle of a large vessel. It bears a simple incised ornament. In Pl. clv, fig 20 a meandering line is traced with a point of a stick on the side of the vessel. Though very common in modern ware, this is not so usual in ancient pottery from Palestine as might perhaps have been expected.

(e) *Painted* ornament, applied with a brush to the surface, now becomes the commonest, and is in this period at its highest level of excellence, obviously owing

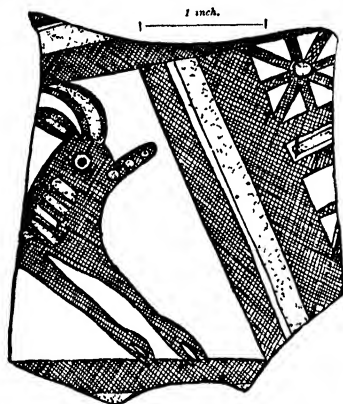


FIG 333.—SPECIMEN OF PAINTED ORNAMENT, SECOND SEMITIC PERIOD

to the direct influence of foreign models. The following is a list of the chief classes and motives of painted ware:—

(1) Rings of colour (usually dark red) surrounding the vessel. These are common in this and all subsequent periods, outside the vessel—for obvious reasons they are not so common inside, though Pl. clvii, fig. 20 is an example. Concentric circles are also found surrounding the centre of the upper surface of flat bowls. Separate vertical lines (apart from groupings with zigzags and other devices) are conspicuously uncommon in this period; Pl. cliv, fig 29 is an example.

(2) Groups of fine parallel lines, vertical or fretwise, broken occasionally by zigzags, painted in black or a continuously burnished light brown, red, or yellow background. The lines are always made as truly and evenly as though ruled. They often cross one another in groups. See Pl. cxlv, figs. 1, 2. A combination with circlelets, as in Pl. cxlv, fig 4, is less common. These vessels are probably not of local manufacture. They much resemble in their decoration certain early

Minoan vessels from Crete, but cannot be so ancient as the date usually assigned to that period.

Coloured specimens, shewing the variety of form and appearance, will be seen in Pl. cxi, figs. 5, 7. Fig. 9 illustrates the treatment of the neck of a vessel thus decorated. A very beautiful variety was found, of which fig. 8 on the same Plate is a specimen; here there was a dark red or grey slip in which the lines were painted in purplish or brick red. Though in this case there is much less contrast between the background and the pattern than usual, the latter is always quite distinct.

(3) An effective form of decoration, applied to the same ware as the last, is illustrated in Pl. cxlv, fig. 3. In this a pattern of bold lines is drawn across with a number of finer lines irregularly *dashed* or *shot* in, so to speak. A glance at the illustration will make this clearly understood. See also Pl. clvii, fig. 15, in which the lines are dark red on light red. To the same class belong the groupings of lines (black or yellow) shewn in Pl. cxlv, figs. 4, 5



FIGS 334, 335—SPECIMENS OF PAINTED ORNAMENT, SECOND SEMITIC PERIOD

(4) Combinations of "ladder-like" ornament from the Cypriote milk-bowls already mentioned, and their imitations. Sherds shewing different slips and varieties of this decoration are drawn in colours, Pl. cxi, figs. 12-15.

(5) On large bowls of shape (o), a frieze divided by groups of vertical lines or zigzags into "metopes," each containing some such device as a bird, a fish, or a geometrical pattern. The same style lasts into the following period, but it is easy to distinguish them. *In the earlier period* the figure is outlined in broad strokes, and the spaces between the strokes are then filled in with another colour. Typical examples are Pl. cxi, figs. 10, 11, which also shew one of the commonest motives—a quartered square with diagonals, like a Union Jack. This also appears in fig. 333, which shews as well a curious nondescript animal figure in red and black. *In the later period*, the figures are outlined in narrow strokes—generally of a greater number than in the earlier device—and the spaces between them as a rule are left empty.

Good examples are seen in figs. 334, 335. In the first of these a fish is first outlined in bold black strokes, and then most of the spaces left blank are filled in in red. In the second there is a geometrical pattern in black, which is likewise filled in in red. The essentially polychromatic character of the decoration and the boldness of the strokes are well illustrated by these two specimens. In fig. 336 is a fine

example of such a bowl, probably late in the period. The herringbone division between the metopes is not uncommon. The birds' necks are in red, the smaller bird figures in black. The naïve frieze fig 336, from a very fragmentary bowl of the same period, shows the same style of painting.

The same treatment applied to purely geometrical patterns is illustrated in Pl. clvii, figs. 7, 9. In the first of these there are three bold black horizontal lines at the top, with the space between them almost filled by similar lines in red. The metopes are divided by a broad black band, on which is painted a red zigzag, with white oblique lines in alternating directions, filling its angles; the metopes

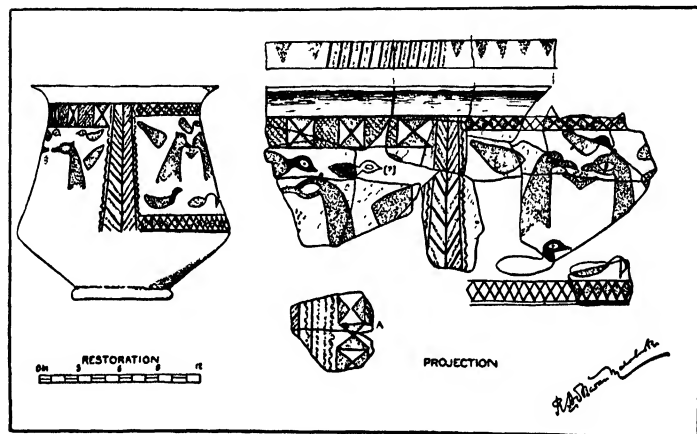


FIG 336 —FRAGMENTS OF A PAINTED BOWL, SECOND SEMITIC PERIOD

themselves are painted white. on the surviving metope is a red triangle and part of a red line. In fig. 9 the metopes are divided by two groups of black lines, the space between them subdivided by horizontal lines into blank spaces containing a hatched double-axe pattern. There are red lines filling the spaces where they are shown in the drawing.

(6) The custom of painting a dark brick-red band on the edges of bowls, lamps, and similar vessels, introduced by the Troglodytes, still persists and is fairly common.

(7) Jar-handles are often decorated with this device \* in red, as Pl. cxl, fig. 21, or with a herringbone, as Pl. cxlv, fig. 7.

(8) Other devices not so easy to classify, and calling only for passing notice, will be found on Plate clvii. Figs 1-3 are three sherds of a bowl, of reddish-brown

ware, decorated with bold red lines. The patterns seem to have consisted of groups of concentric circles, but the vessel was too imperfect to allow it to be made out completely. The peculiar handle of this vessel has already been referred to. Fig. 5 contains a pattern which it is impossible to identify—perhaps it is one of the common bird figures. Three colours are used, which is less common than two—black, red (represented in the drawing by close hatching), and white (lightly hatched in the drawing). The background, which is left open in the drawing, is of the normal buff colour. The remarkably naturalistic flower fig. 6 looks more like a Hellenistic fragment. In the Second Semitic stratum it is quite unique. The colour is red on a white slip. Fig. 8 also is not very common. The ground colour of the pottery (hatched) is Vandyke brown; on this, bold black lines and finer lines and dots in white are painted, as in the figure. Fig. 10 is the margin of a bowl, painted red; underneath it are two black lines; the potter has then begun a zigzag but not finished it. Fig. 11, the upper surface of the edge of a bowl, bears a pattern in white on a red ground, which looks like an effort to imitate an Egyptian guilloche. In fig. 12 the band and the zigzag are burnished

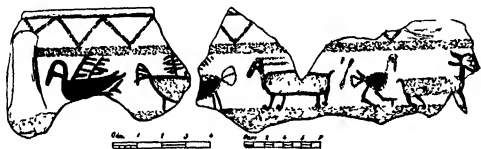


FIG. 337.—PAINTED FRITZE OF ANIMALS AND BIRDS, SECOND SEMITIC PERIOD

black on a brown ground. In fig. 13 we have a curiously irregular pattern of random black and reddish-brown daubs, the latter having black dots upon them. Another curious pattern is fig. 14, the edge of a bowl with vertical black "ladder" red lines joining the ends of corresponding horizontal bars. In fig. 16 we have the neck of a vessel, ornamented on the outside with alternate white and red rings, and on the inside with a white band on the lip, having oblique red lines crossing it. The ware itself is dark brown.

(f) *Stamped and Punched ornament*.—Pl. cliv, fig. 3, which is late in this period, is one of the very few specimens found in the Second Semitic ware of a vessel ornamented with punched or impressed decoration. It has evidently borne a row of circular sinkings on the brim. In II 18 was found a ledge-handle with a similar row of circular punch-marks upon it. Punching and stamping do not become common till quite late in the history of Palestinian pottery. An exception, however, may be made in favour of the punctured ornament of the Egyptian vessels of shape (e). The fragment Pl. cliv, fig. 6 is a good example: the dots are filled in with a white composition. The carelessness of the lines suggests that this particular specimen may be local imitation of Egyptian models. The ware is compact and homogeneous, of a grey colour.

(vii) **Potters' Marks**—These are very common in the Second Semitic Period, especially on the handles of large jars. They are of three classes:

(1) Finger impressions, generally of the index finger, but not uncommonly of the thumb, most frequently on the outer surface of the handle at the upper attachment either singly or in groups. They have occasionally been found over the lower attachment, and more rarely inside the mouth of the vessel, at the point where the outer attachment joins it; also sometimes on the inner surface of the handle.

The mark of the edge of the nail, and the print of the papillæ of the finger, are often clearly traceable. The nail is usually at the top, but sometimes it is at the bottom of the impression, shewing that the potter stooped over his work to make his mark. Pl. cxc, fig. 27 is an example in which scratched lines radiate from the finger-print.

(2) Linear devices of various kinds scratched roughly on the vessel with a pointed instrument. These are most commonly rough crosses of two lines, scratched usually on the handle of the vessel, as in the double cross in Pl. clv, fig. 17, but sometimes, as in Pl. clv, fig. 12, they are on the bottom of the disc-base. Pl. clii, fig. 3 is another example. In fig. 7 of the latter Plate the cross is marked just under the rim of a bowl. In Pl. cxc, figs. 20-41 are a collection of such marks from Second Semitic pottery. The potter who signed his work with three radiating lines *near the edge* of the handle (fig. 21) was a very industrious tradesman: a good many specimens of his work were found. Fig. 38a is a group of four indentations made with a stick on the back of a handle. Throughout the periods these marks are usually scratched over the *upper* attachments of the handles of jars—much more frequently on large than on small vessels. They are sometimes over the *lower* attachments, and occasionally are found on the undersides of the disc-bases of bowls.

(3) Impressions of seals, which at Gezer were almost always twelfth-dynasty or Hyksos scarabs. These were very common there, though such impressions have been but rarely found in other excavations in Palestine. Though the seal was often badly stamped or worn, and thus more or less undecipherable, in many cases the mark not only of the scarab itself, but of the gold mount and the swivel attachment to the seal-ring, could easily be traced.

(viii) **Pottery Groups**.—The most important by far is the great series of pottery from cave 28 II shewn in Pls. xxxvii-xl. We may also refer to cave 15 I (Pls. xx-xxiii) and tomb 1 (Pls. lx-lxiii) as good examples.

#### D—THIRD SEMITIC PERIOD

(i) **Foreign Imports**—Aegean and Cypriote vessels continue to be found, but they are perhaps fewer and less elaborate than those of the earlier stratum. Most of the specimens found were deposits in the tombs; apparently they were precious objects deposited with the dead. Pl. clviii, fig. 2 is a saucer in the ware with grey slip and basket-work white decoration, of a shape not found in this ware elsewhere in Gezer. "The ladder pattern" still continues in frequent use: see Pl. clix, figs. 2-4, and especially the fragments of a spouted bowl, Pl. clxvi, fig. 9, and of a

fine pot, Pl. clx, fig. 13. Compare also the vase from tomb 30, Pl. lxxiv, fig. 3. The local imitations give the impression of being reminiscent (copies of copies) rather than direct transcripts of the pattern. They fall into stereotyped groups both in form and in decoration, and display a complete lack of even a desire for originality.

A few vessels, but not many, are recognizably of Egyptian origin. One of these is fig. 338, found in III 4. The surface is dark red, burnished: the height about 8".

(ii) **Technical Processes.**—As before, the wheel is now used for all vessels except, occasionally, rough saucers like Pl. clviii, fig. 8. The direction of revolution is always counter-clockwise. In the bowl Pl. clviii, fig. 3 the potter has endeavoured to paint red lines and a zigzag on his handiwork *freehand*, without using the wheel. The result is not a success. The method of trimming with a knife, already mentioned, though rare, is not unknown.

(iii) **Ware.**—As a rule the ware is fine and homogeneous, though with small sandy particles. A few specimens of extremely gritty ware are to be found, but these are in a small minority. A yellowish colour is common in the fractured edge. There is on the whole no very great difference between the clays used in this and the preceding period.

(iv) **Shapes.**—(a) Jars have the same general characteristics as in the previous period, but the base as a rule is blunter. A dome-shaped base (rather like the end of an umbrella from which the projecting stick has been cut) now comes into use. It is not, however, so common as in later periods. Pl. clxi, fig. 5, which appears to be rather early in the period, is curious, and indeed, so far as I know, unique. There are four handles, three of them in the usual position on the sides. The fourth, which is lost with the neck of the vessel, must have been attached to the lip, as is shewn by the angle at which the surviving stump is set



FIG. 338. —EGYPTIAN VASE

and by the absence of any trace of a lower attachment on the level of the bottoms of the other handles. The jar Pl. clxi, fig. 8 has a pointed base like the Second Semitic bases, but is rather more stumpy than is usual with these.

(b) One-handed jugs, while they remain essentially the same as the one-handed jugs of the preceding period, show a woeful degeneration in the grace of their outline. The delicately curved oval mouth is gone, its place being supplied by a round mouth, with or without a spout: and the body, both in its curvature and its proportions, is quite remarkably inferior to that of a Second Semitic jug. These observations may be illustrated by reference to Pl. clxiv, figs. 2, 3, 6 (which may be Second Semitic), 7 (a very small example), 8 (in a flaky red ware), 12, 13 (a reminiscence of an earlier form, but found in Third Semitic context), 16, 17, 19, 21;

Pl clxi, figs 1, 7, which illustrate different varieties both oval and globular; these will be recognized as degenerate survivals of Second Semitic types. Pl. clxiv, fig. 4 is curious. The shaded triangle in the drawing represents the stump of a lost handle; apparently when the handle broke two holes were drilled through the side of the vessel for a cord to supply its place. That the owner of this wretched little jug thought it worth his while to take such trouble gives us a picture of extraordinary poverty or extraordinary parsimony.

(c) Waterpots, used especially at cisterns as fillers for the larger jars, are made after the fashion of Pl. clxiv, fig. 5. A more perfect example could have been chosen for illustration, this specimen has, however, been selected as it has a special interest. It was found associated with the strange deposit of bones in the cistern III 2 B, to be described in a later chapter. The body is conical, tapering to a flat, or more frequently, a ring base; there is a concave neck, a mouth, usually spouted, and one handle.

(d) Jugs like Pl. clxiv, fig. 15, with globular body, long cylindrical neck, and one or, as in this case, two handles, are evidently imitations of Cypriote imports. This specimen is in reddish ware.

(e) Two-handled jugs, pointed or blunted base, oval body, two loop-handles on the sides, concave neck ending in a continuous mouth. There are a number of varieties of this type, which are also found in a variety of sizes. Pl. clxiv, fig. 1, is perhaps the simplest form. There is a flattened base,  $\frac{3}{4}$ " in diameter. In fig. 9 on the same Plate the mouth is wide and there is a groove emphasizing the shoulder: the ware is of a yellow colour. Fig. 14 may here be mentioned, though the heavy moulded shoulder and the general massiveness of the whole vessel, which belongs to the very beginning of the period, gives this specimen an individuality of its own: compare fig. 11, which however does not appear to have had handles. This form is perhaps rather too uncommon to be treated as a separate type. Pl. clxi, fig. 2, with bands of red and black lines ornamenting it, is shewn by its button-base to belong to the Second Semitic, or it may be to the very beginning of the Third Semitic Period.

(f) Small pots with rounded base, conical body, and two ear-handles. This type is commonest in the Fourth Semitic Period, but begins to appear in the Third. Pl. clxii, fig. 9 is an example.

(g) Globular vases: disc-base, globular body, cylindrical neck, continuous mouth with a slight moulding round the rim. There is usually a loop-handle and very often a filter or spout, which is a quadrant round the vessel from the handle, not diametrically opposite it, as is the case of a mouth-channel. These vessels are in the same ware, and decorated in the same way, as the large bowls of shape (q), described below. Examples will be seen in Pl. clxiii, figs. 4, 5, and another is Pl. clviii, fig. 15. Pl. clx, fig. 1 may be treated as a simplified form of this type. It has a flat base, and neither handle nor spout. The design of the decoration is unusual.

(h) Bugelkannen, made locally in imitation of imported specimens, were sometimes found. Fig. 339 is an unusually good example, though it has lost its spout. It is adorned with a painted frieze of birds of common pattern, and other characteristic devices. These vessels are generally of small size: but the false neck of one example

was found the disc of which measured  $2\frac{3}{4}$ " in diameter. It was rather coarsely made and ornamented on the top with a roughly painted cross in a circle.

(*f*) Small globular spouted vessels, disc-base, globular body, narrow short concave neck and continuous mouth. A short spout projects from the side generally a little above the wider part of the body. The spout is straight and inclined to be conical. A transverse loop-handle is attached to the lips, crossing the mouth. See the bottom row in fig. 168 (Vol. I, p. 326). Pl. clxiv, fig. 20 is an example decorated with alternating rings in black and red. The top of this example is broken off. Fig. 18 is probably a variety of the type; it has a body rectilinear in section, having abrupt angles at the base and shoulders, and has a channelled filter spout instead of the simple tube. The top being lost we cannot say whether it had the vertical

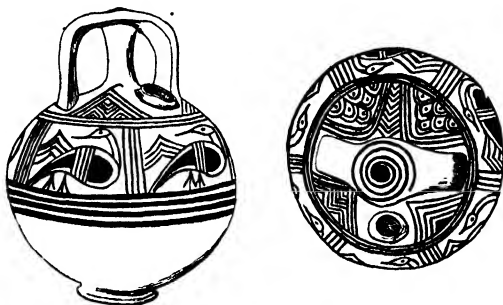


FIG 339 —BUGELKANNEN

loop-handle that the normal specimens display. Probably these are modifications of the Bugelkanne form.

(*j*) Lentoid vessels, as in the previous period, and much commoner. They are almost always ornamented with groups of concentric circles painted on each side.

(*k*) A curious development of the lentoid vessel is found in this period. It has so far not been noticed elsewhere in Palestine, and Professor J. L. Myres in answer to an enquiry of mine has informed me that the type is very rare, though specimens are known from Cyprus. In this, one side of the lip of the mouth is prolonged upwards in the form of a little circular saucer. There are two forms, with loop-handles and transverse ear-handles. These two varieties are shown by the specimens in the top row of fig. 168 (Vol. I, p. 326). The second row in the same figure shows lentoid vessels of the ordinary kind.

(*l*) Another freakish form of the lentoid vessel is a tubular ring, to which the ordinary neck and handles of the lentoid flask are attached. Perfect specimens of this type were extremely rare, though broken fragments were not infrequently found. This probably belongs to the very end of the Third Semitic Period. Pl. clxi, fig. 3



is an example, with a triangular section. It is covered with a red slip. See also Pl. lxxxii, fig. 2a.

(m) Pl. clxii, fig. 11 shews a peculiar vessel. It resembles a small lentoid bottle, but one side is considerably deeper than the other, and a circular hole is neatly cut out of its middle, as the drawing shews. There were probably two loop-handles on the sides of the neck, which, with the neck itself, are broken off. Nothing like this was found elsewhere in the excavation.

(n) Pots without handles, as in the barrel-shaped vessel Pl. clxiv, fig. 10, are distinctly uncommon in this period. Fig. 340 shews another example with a cover having a perforation through the middle. The total height is 6". Minute pots like Pl. clxi, figs. 4, 6 are however not unusual. They are probably meant for holding kohl or ointment or some other cosmetic.

(o) Pl. clviii, fig. 7 is a unique specimen. It is a globular cup, with no neck, the



FIG. 340.—POT WITH COVER

mouth being simply a circular hole cut in the top, and with two smaller holes cut beside it, evidently for suspension.

(p) Bowls like Second Semitic (n) Pl. clxii, fig. 13 is an example with a red painted line round the margin. Fig. 14 is a flat ornamental variety standing on a trumpet-shaped foot and covered with a white slip.

(q) Bowls like Second Semitic (o) persist without any special change of shape. In some cases the normal transverse handles are inverted, adhering along their whole length to the vessel so that they take the form of a ridge projecting from the side in the shape of a U. Pl. clxiii, figs. 1-3 are good examples, shewing the ordinary form of decoration. Fig. 341 is the very large example which was found in the olive-press described above, p. 66. It is decorated simply with painted rings. A splendid specimen is shown in Pl. clviii, fig. 1, and others will be found on Plate clxiii.

As a freak, probably belonging to the beginning of this period, may be mentioned a large bowl of this kind found in many fragments, which had the peculiarity of having no less than twenty loop-handles (fig. 342).

(*r*) Miniature bowls of the form of (*q*) become common; they differ in the ornamentation, which consists simply of coloured lines, and never is elaborate as in the large bowls. At most there may be a zigzag (as in Pl. clviii, fig. 3) or spirals and their varieties, as in figs. 11, 16, on the same Plate. An unusually small example



FIG. 341.—LARGE BOWL, THIRD SEMITIC PERIOD

without handle or ornament is shewn in Pl. clxi, fig. 11. It is  $2\frac{1}{4}$ " high, and hand-modelled.

(*s*) Small shallow saucers with flat bases, and straight or curved expanding sides. Some of these were most probably for the toilet. Examples are shewn, in different shapes and sizes, in Pl. clxi, fig. 9, Pl. clxii, figs. 2, 4, 7, 8 (with round base), 12 (probably Second Semitic), 18 (covered with a shining white slip). A variety of the last-mentioned form, probably serving some special purpose, was sometimes found; an example is shewn in Pl. clxii, fig. 19. There is here a vertical tongue projecting from the side of the vessel, perforated, either for suspension or for a



FIG. 342.—FRAGMENT OF A VESSEL WITH TWENTY HANDLES

rivet attaching it to something else. A larger specimen of a similar object will be found drawn in Pl. clxviii, fig. 20.

(*t*) Bowls with filter spouts. A specimen of this common form is shewn in Pl. clxi, fig. 10. There is usually a ring or hollow disc-base, and the body expands

upwards from this, then suddenly contracting. The sides are rectilinear in outline. There is a spout, consisting of a semi-cylindrical channel, projecting from the sides, the wall of the vessel being pierced with a strainer of small holes at the end of the channel. These are well shewn in the diagram. In some specimens, owing to the carelessness of the potter, the perforations did not all penetrate through the screen.

(u) Similar bowls to those just described with straining filters, but without the filter. This form is equally common, or perhaps even more so. Pl. clxi, fig. 15, a rather early example, is a good specimen.

(v) Hemispherical saucers on ring-base. A good example appears in Pl. clxi, fig. 13,\* and another in Pl. clxii, fig. 20. See also for larger examples Pl. clxii, figs. 5, 21: in the latter the lip is slightly moulded. Pl. clviii, fig. 14 is a specimen rather shallower and wider than the rest, and is transitional to the V-shaped bowl Pl. clviii, fig. 10. Varieties of this type are obtained by rounding off various parts of it, and other minor modifications. Pl. clxii, fig. 1 has a rounded base. Fig. 3 has a flat base without projecting disc. Fig. 15 is somewhat similar, but the angled rectilinear sides are rounded off into a continuous curve. The remarkable clumsy, almost cylindrical beaker fig. 22, which has two holes (probably for suspension), pierced, one on each side, may be regarded as an extreme specimen of this type, the curvature being smoothed off to the farthest possible degree without vanishing altogether. An exaggeration of the type in the opposite direction appears in Pl. clviii, fig. 9. It will be evident that this type rapidly shades into the varieties of type (p) above. Handles are sometimes added: in Pl. clxii, fig. 17, a water-jar found in a cistern (very late in the period), there is a single loop-handle added to a vessel of the variety exemplified in fig. 15 on the same Plate, already mentioned. In Pl. clviii, fig. 12 there are two handles on a flat bowl, which however retains the essential form of the main type. This is rather early in the period. In fig. 13 on the same Plate a spout is added as well as a handle. This feature is much less usual in the Third Semitic Period than in later times. In these vessels the spout is almost always so low down in the side of the vessel that they can never have been more than half filled, and the bore of the spout is usually so slender that liquid can only pass through it in a very gentle trickle, or sometimes in separate drops. Spouted animal figures display similar peculiarities. Thus, though the figure Pl. cxiv, fig. 14, is hollow and provided with an orifice for filling at the top, it will hardly hold any liquid at all as the spout is so low down. It is possible that these vessels may be some device for measuring liquids: and possibly also they may have been flasks for feeding infants or the sick, though the extreme narrowness of the bore is against this view.†

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\* A crack in the texture of this saucer has been stopped with a "blob" of lime-cream applied to both the inner and the outer surfaces.

† It is perhaps just as well to anticipate the suggestion that might seem plausible enough, that such vessels as these were used for measuring medicines drop by drop. (The suggestion was actually made to me with regard to the vessels of shape (k), by a German archaeologist who visited the mound. I am, however, inclined to dissent from it for the reason stated

The saucer Pl clviii, fig. 4 is another variety of the same form. This specimen has had one handle (probably a simple knob), which is broken off. There are marks of fire on the edge of this vessel. Pl clxi, fig. 16 (inside fig. 3) is a saucer, almost cylindrical, on a flat base, with a curious painted decoration in red and black upon it.

Pl clix, fig. 9 is a specimen of the original type, with handles, and decorated with a coloured pattern.

(w) Pl clxii, fig. 9, which is very early in the period, is an unusual form, though the Fourth Semitic Period has yielded an analogous specimen or two. The ware is of a Venetian red colour. The small knob at the bottom recalls the button-bases of the preceding period, though it is evidently not quite identical with them. From this point the vessel expands in a hemispherical shape. There are two similar knobs on the rim, which look like a degenerated button-handle. The opposite edge happens to be broken, but there were probably similar knobs here also.

(x) Pl. clxii, fig. 10 is another peculiar vessel, of which unfortunately only a fragment survived. Enough remained to shew, however, that it was a flat circular disc of pottery, the edge, where unbroken, ending abruptly, not turned up or thickened in any way, standing on a wide and massive ring-base. The ware was of a dull red colour. There were two (and possibly more) concentric circles of punched dots in the upper surface. The complete dish must have been of considerable size, and probably it was intended for bread or some similar food that would not be liable to slip off.

(y) V-shaped bowls, of which Pl. clxii, fig. 6, on a hollow ring-base, is a good example. This specimen is ornamented with ribbing on the same surface. This is one of seven bowls found all together—six were of the type shewn, the seventh was of the more ordinary variety (p). Another V-shaped bowl, Pl. clviii, fig. 10, has already been referred to as the end of the evolution of another type. The boundaries between different types of vessels, as has already been said, are often very hard to define.

(z) Saucers and jugs perforated with holes to serve as filters are found in this period as well as in the last.

(a<sup>1</sup>) Lamps resemble those of the previous period, save that the spouts are longer and with parallel sides. The contrast is well shewn in the photograph fig. 326 (p. 165).

(b<sup>1</sup>) Multiple lamps begin to make their appearance, though these are not very common. They consist either of bowls with several spouts radiating round the rim, like the Fourth Semitic specimen Pl clxxv, fig. 1; or else of tubular or solid rings of pottery—on which are mounted a succession of single lamps. When the stand is a *solid* ring the lamps are all independent, each having its own supply of oil: when it is a tube, it is usually itself the reservoir, and each lamp has a hole through

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in this footnote, though if it were admitted there would be a certain obvious appropriateness in the frequency with which vessels of this kind were found in *tombs*. It is hardly to be believed that these modern niceties had been introduced into ancient Palestinian leechcraft. I gather from my medical friends in practice in the country that one great source of trouble is the utter inability of the average modern Oriental to comprehend the importance of a gradual method of treatment. They argue quite logically that if a bottle of physic taken so many drops a day for a fortnight will cure at the end of that time, then the whole bottle taken at once will cure instantaneously. The results are easily imagined.

which the wick was passed. The square lamp with four spouts (like Pl. xxviii, fig. 9), though already in use in the Second Semitic Period, survives into the Third.

(c<sup>1</sup>) *Lampstands*.—A peculiar object from IV 2 like a vertical drain-pipe, with moulded top and foot, has been already mentioned, and illustrated in fig. 327 (p. 166). As the figured dimension shews, it is 1' 5½" high. It is in a drab-coloured ware, and has not got the puzzling side perforation described in Second Semitic shapes (a<sup>1</sup>).

(d<sup>1</sup>) A perplexing type of vessel is represented by Pl. clviii, fig. 5. I confess myself unable to guess what they may have been intended for. They are referred to sometimes as "cups and saucers," which they resemble, but perhaps a better comparison would be with the old-fashioned flat bedroom candlestick. The drawing, which shews the example in section, will best give an idea of their construction\*. A plausible suggestion has been made that they may have been stands for holding upright the pointed-bottom jugs, which of course would not remain in position without such support, and the fact that there is often a channel through the wall of the "cup" part of the compound vessel, so that any liquid dripping through the porosity of a supported jug

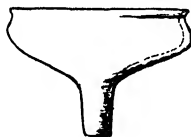


FIG. 343.—BOTTLE-FILLER

would pass freely into and accumulate in the saucer, seems to be in favour of such a suggestion.†

If the base of the "candlestick" were always, as it is frequently, one of the flat varieties—a disc-base or a ring-base—this might be a feasible suggestion, although it cannot be denied that the socket is as a rule too small to receive the base of any but the smallest jugs. But this particular example has been chosen for illustration because it has a *round* base, and therefore would be as unsteady as the jug it was theoretically intended to support. It follows that this particular "candlestick" cannot have been meant for the purpose suggested, and as we can hardly suppose that the flat-based examples had a purpose different from the specimens with round bases, the question of their use must still be considered open.

(e<sup>1</sup>) A shallow four-sided tray, with rounded corners, of coarse but hard-baked pottery, was sunk to its rim in the pavement in the middle of IV 27. This tray

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\* In First Semitic shapes (s), and Second Semitic shapes (y) we have seen early examples of this type of vessel.

† The pottery water-jars in use in Palestine must always be placed standing in a saucer to collect the drips constantly falling from them. The more porous the jar, the cooler is the water, so no objection is made to this slight inconvenience.

measured 1' 9" x 1' 4" x about 6" deep. Underneath the pavement was a great mass of cow and sheep bones.

(f<sup>1</sup>) Bottle-fillers like fig. 343 may here be mentioned. The example figured is 4" high and 5½" in diameter

(v) **Details.**—*Ring-bases* are common in this and the subsequent periods flat and hollow bases are also found, but much less frequently. Bowls with a hole cut in the middle of the base are common in this period.

The *jar-handles* are all long loops, either inverted triangular or in some few cases heart-shaped. One or two cases seemed to anticipate the short horizontal oval form that is characteristic of the following period, but these were very rare. They are never moulded, though some have a ridge (or else a groove, usually stopped before reaching the upper attachment) running down the back. A few have a hollow chamfer on the edges. In one case found in IV 2 there was a bar of pottery apparently meant for a loop-handle, but flattened so as to adhere to the vessel along its whole length. This was probably merely a potter's freak. So is the small loop-handle (broken) on the neck of a large jar, Pl. clxviii, fig. 17.

The button-handle shaped like a dice-box (Pl. clv, fig. 7) is common in this period. It is less frequent to find it as an ornament at the top of a loop-handle, as in Pl. clxviii, fig. 12. What may from its shape be called a "rat's-tail" handle is sometimes found in this period. No whole vessels were found with this appendage but it seems to have been attached to shallow saucers. Pl. clxviii, figs. 6, 13 are specimens—the latter being ornamented with a herring-bone of indentations which have been inlaid with white, that stands up boldly against the black-coloured pottery.

Loop-handles of several strands are still found in this period, though as a rule not twisted or plaited. Pl. clxviii, fig. 16 is an example with two small strands at the side. In fig. 2 on the same plate there are two strands running down the back, and ending spirally. In fig. 15 there is a small knob intercepted between the strands.

Among unusual features may be mentioned the "wing-handles," as they might perhaps be called, that decorate the saucer Pl. clxii, fig. 16. There was evidently one in each quarter of the circumference. They are in a sense modifications of the old ledge-handles, but are smaller and more ornamental. They are rare in Palestinian pottery. This vessel is hand-modelled and painted red.

The curious object represented in section in Pl. clxi, fig. 12 resembles the cylinders of pottery already described and illustrated from the preceding period. This example, however, is conical, and is evidently incomplete. I am at a loss to explain the relation of this fragment to the vessel of which it formed a part. It may possibly be a projecting handle, recalling the false-spout handles that we have already seen to be characteristic of the First Semitic vessels. The two holes opposite one another, at the attachment of the projection to the side of the vessel, would then be for a string by which it could be suspended. But this is of course conjectural, there is not enough of the vessel left to determine its nature or the exact relation between its surviving parts.

In this period a device is introduced, which, however, becomes commoner in the next: an illustration is shewn in Pl. clviii, fig. 6. It is a bottle-filler attached to the side of a vessel. This is really a revival of the old pillar-spout, already mentioned, but is an

improvement. It is evident that if liquid containing impurities were poured slowly through this receptacle into the vessel, the impurities would for the greater part sink to the bottom of the conical cup, while the liquid would pour through the side orifice. A more ornate form is shewn in Pl. clxviii, fig. 11. In the Fourth Semitic examples, however, this side orifice was abandoned, and the filler was made of a Y-shape, the orifice being made in the bottom of the conical cup. Probably it was found by experience that the impurities did not after all accumulate so thoroughly in the base of the cup, and that when they did it was a trouble to clean. The orifice in the later examples was made much narrower. Finally the orifice disappeared altogether and the Y-shaped cup became a mere useless rudimentary appendage.

In trench 2 was found the neck of an amphora that must have been of great size. The neck was cylindrical, 1' 2" long and  $6\frac{1}{4}$ " in diameter. It was made in two thicknesses of pottery, each  $\frac{3}{8}$ " thick.

The plate of pottery, perforated, Pl. clxviii, fig. 14, is probably the handle of a vessel something like a frying-pan, the perforation being for hanging it to a peg. There was nearly always simple scratched ornament as in the example drawn. Similar objects were found in the Second Semitic Period, to which indeed this specimen very likely belongs.

The saucer-like jar-stoppers with two loop-handles (fig. 329, *ante*, p. 169), persist into this period and then disappear. Pl. cxci, figs. 6-8 shew three specimens of clay jar-stoppers. Figs. 6, 8 illustrate devices for permitting steam to escape and preventing it from bursting the vessel. The latter of these was found loose in waste earth, but is probably of the Third Semitic Period. It is rudely hand-modelled.

(vi) **Ornament.**—(a) *Combed* decoration is rare, but not completely absent. The fragment of saucer Pl. clxi, fig. 14 shews an application of the comb, to make a group of six incised rings round the outside of the lip. Paint is combined with this decoration, a band of carmine covering the area containing these rings. Immediately beneath is a band of a glossy light greenish colour, which is again succeeded by a stripe of carmine. Whether this covered the whole base we cannot tell, as only a fragment survives, the middle of the bottom being gone. The diameter of the whole saucer—of which only parts of the rim survived—was about 8". The sherd Plate clxviii, fig. 19 is a good specimen of delicate combing.

(b) *Burnished* decoration is used, but with neither the frequency nor the skill displayed in the earlier pottery. Continuous burnishing is quite abandoned. As a rule it is applied merely in lines or single groups of lines. thus Pl. clxi, fig. 1 is a jug ornamented with vertical lines on the side.

(c) *Moulded*—There is but little moulded decoration. Conical knobs are sometimes added to the upper attachment of handles, especially of wide-brimmed bowls. and a row of cylindrical knobs sometimes stands on the top surface of the lip as in Pl. clxviii, fig. 18. We may in this connexion notice a fragment, 6" long, of the neck of a vessel (fig. 344) which probably belongs to the very end of this period. It is cylindrical, and has round it a curious moulded collar, strangely suggestive of the ledge-handles of the earliest periods. This was found in trench 2.

(d) *Incised* ornament is even more uncommon. Here and there were found sherds with a horizontal zigzag line traced upon them with the end of a stick

This was the commonest form of incised decoration. The cuts on the side of a fragment of a lentoid vessel (Pl. clx, fig. 11) suggest an imitation of the stitches in a flask of leather. Pl. clxviii, fig. 10 shews in section the rim of a heavy jar, with a fret of scratches traced on one side. Note the moulding of the lip.

(e) *Painted ornament* is the commonest. In general style it resembles that of the Second Semitic Period; but though more elaborate it is inferior in artistic merit. Deterioration, produced by successive unintelligent copying of copies, is very conspicuous. The principal difference between the Second and Third Semitic painted decoration is, that the first is essentially polychrome, the second monochrome: for though two colours are often used in the Third Semitic ware, it is not so evidently a characteristic of the style. Then, figures in the Third Semitic are represented on the whole in outline, and in comparatively fine lines; in the Second the outlines are filled in, and the strokes with which they are defined are broad.

The designs, even in the Second Semitic Period, shew a sad lack of originality on the part of the potters, the same pattern being repeated over and over again with monotonous persistency. This is even more conspicuously the case in the Third

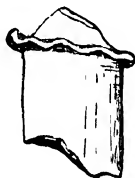


FIG 344—FRAGMENT WITH MOULDED COLLAR

Semitic Period, and the whole system of decoration is reduced to the permutations and combinations of a limited number of motives. The ultimate derivation of these motives from patterns developed under the Aegean civilization is so obvious that it need not be insisted on.

The colours used are generally black; red (Indian red most frequently, but sometimes lighter red; occasionally carmine); and buff (for the background exclusively). Less common are slate grey and white. Blue is extremely rare—not more than two or three examples of blue used in painted pottery were found in the tens of thousands of potsherds turned over. Plate clx, fig. 18 is one of these, but it belongs to the Fourth Semitic Period. Green and greenish yellow are equally unusual.

The following are the motives employed.

(1) *Spirals*—These may be single, closed by making the outermost whorl join the next tangentially (as in Pl. clviii, fig. 1) or may be joined to other spirals. This is always awkwardly managed, as in Pl. clxiii, fig. 4, the interlocking of double spiral lines (as in the designs on twelfth-dynasty Egyptian scarabs) being apparently beyond the skill of most Palestinian potters. Pl. clx, fig. 3, which is an unusually well-painted specimen, red and purplish black on a yellow slip, is almost if not quite the



only example noticed. The spiral is by preference drawn right-handed\*—i.e. a moving point tracing out the line from the eye to the outer termination moves clockwise: even when, as in Pl. clviii, fig. 16, an awkward recurving would be avoided by reversing. See also Pl. clxv, fig. 8. The eye is always a circle, formed by closing the inner whorl; it may be filled up with a blob of the same colour as the spiral (as in Pl. clviii, fig. 16), or of a different colour (as in fig. 15);† or else, as is very common, two double axes crossed, as in fig. 1. The axes are outlined in black, but usually filled in, either one black and the other red, or else both red. Very unusual is the  $\Omega$ -like device in Pl. clxvi, fig. 3.

Some jar-handles are decorated in a curious way. Evidently the potter swept a brush with red paint in a free-hand spiral curve, certain sections of which left a trace across the handle, the remainder being imaginary. See Pl. clviii, fig. 17 for an example.

(2) *Concentric Circles*—These, which are the degeneration of the spiral motive, are not uncommon. They generally have a point at the centre. Pl. clxvii, fig. 17 shows a continuous series, joined by tangential lines. Pl. clx, fig. 12, which represents the side of a lentoid bottle, shews concentric circles of alternate colours. This is not very common.

(3) *Concentric Semicircles*, the half of no (2), are even commoner. In Pl. clviii, fig. 11 (where they are in red—a less usual colour than black for the spiral or its modifications) they are to be seen in the simplest form. In Pl. clx, fig. 7 a blob of colour fills the centre. (This fragment is interesting, as it seems to be unfinished: faint red lines are pencilled below as though to guide the potter in further decorating the vessel). An elaboration of this treatment of the design is to be seen in Pl. clxvii, fig. 6. Pl. clviii, fig. 15 shews a very frequent position for them, on the abruptly sloping necks of certain forms of vessels. Two groups placed symmetrically on the opposite sides of a group of parallel straight lines are very common. The lines may be horizontal as in Pl. clviii, fig. 1, or vertical as in Pl. clxiii, fig. 7. Concentric segments of circles often serve as an ornamental filling for the corners of lozenges and other angled patterns (see Pl. clx, fig. 8, Pl. clxvi, fig. 13).

(4) *Chequers of Vertical and Horizontal lines*, as in Pl. clviii, fig. 1. The squares thus formed are either left open, or filled in with black or with red. There is usually an alternation of these different methods, though there are several different schemes of arrangement of the colours.

(5) *Zigzags*.—These may be horizontal, as in Pl. clviii, fig. 3, Pl. clxvii, fig. 3, or (more commonly) vertical as in Pl. clxiii, fig. 3. They may be single, or in groups, as in Pl. clxvii, fig. 9. They generally have one or more straight lines on each side of them, as in Pl. clxiii, fig. 1: to this form I have elsewhere given the name "panelled zigzags." Pl. clx, fig. 10 is a remarkably confused example.

As a rule the zigzag and lines are of the same colour, as Pl. cxl, fig. 22: sometimes, however, the colour is contrasted as Pl. cxl, fig. 3. Less common is a fret of two opposing zigzags, as Pl. cxl, fig. 16. It is rare to find the successive bends of a

\* Though left-handed spirals are not altogether avoided.

† In a few very rare examples the blob extends beyond the limit of the inner whorl.

zigzag in alternating colours as Pl. clxv, fig. 4. In painting continuous patterns like this the potters worked towards the right or towards the left indifferently. In Pl. clx, fig. 7, for instance, the curves have evidently been made from left to right, whereas in fig. 345 they have evidently been made from right to left.

(6) *Triangles in Rows* develop easily from the panelled zigzag, through an intermediate form, such as appears on Pl. clxiii, fig. 7, where the zigzag adheres throughout its length to one of the sides of the panel and not to the other. These triangles are often filled in, either with dots, with a blob of colour (as in the red triangles in Pl. clx, fig. 14), or, very frequently, with a fret, as in Pl. clxiii, fig. 6. The boundary-lines of the triangle are often multiple, as in Pl. clxiii, fig. 8, suggesting a decoration from concentric semicircles.

(7) *Lozenges* are the double of triangles, and are similarly treated, though they are more frequently filled in with a fret, as Pl. clx, fig. 2, than with a solid wash of colour, as Pl. clxvii, fig. 17. A trapezium of colour not entirely filling the lozenges appears in Pl. clxvi, fig. 7, which is a fragment of the lid of a pottery casket

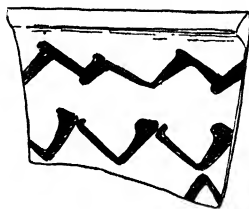


FIG 345.—FRAGMENT OF PAINTED WARE

They very frequently fill in the spandrels between two consecutive spirals, as in Pl. clviii, fig. 15; compare Pl. clxiii, fig. 2. The second spiral in this example has not been closed, by some oversight of the painter: the oblique lines at the ends of the row are a reminiscence of the lines joining continuous spirals. The filling in of the lozenge and triangle in Pl. clxvi, fig. 2, is curious.


(8) *Radiating Lines*, probably derived from an octopus or palm-tree motive, are not very common. A good example is Pl. cxl, fig. 20, where the lines radiate upwards, or Pl. cxl, fig. 18, where they radiate downwards. In the last example a zigzag is combined with the group, forming its outer member. Radiating lines also appear in Pl. clx, fig. 1, which is unusual on account of the slate colour of the background. In Pl. clxv, fig. 3 single radiating lines form a triangular space filled in with dots; and this idea develops such examples as Pl. clx, fig. 3, where the radiating lines end in spirals, and form a basis for other devices. Pl. clxvi, figs. 4, 10 are other good examples, from which it will be seen that this is the most effective device that the potters attained to.

(9) *Groups of Vertical Lines*.—These are commonest in dividing up the painted frieze on jars into metopes; but it is not often that they are used alone without

some other motive combined with them to break the monotony. They are, however, sometimes so used, as in Pl clix, fig. 8. It is rare to find a band of a colour different from the background between two lines of such a group. Pl. clix, fig. 5, is an example. Horizontal lines are not nearly so common, except in the form of rings encircling the vessel above and below the frieze, as may be seen in all the examples illustrated. The little horizontal strokes across two curving lines in Pl clix, fig. 10, may perhaps be suggested by the Cypriote ladder pattern.

(10) *The Double Axe*.—This, reduced to two triangles meeting at their apices, is very common. Pl. clix, fig. 14, shows the normal form. In Pl clxv, fig. 10 it is elaborated by additional boundary-lines and by polychrome treatment: the zigzag crossing it shews that it has become a mere geometrical pattern in the mind of the artist, the original symbolic meaning being forgotten. In fig. 2 of the same Plate it is filled up with a fret. Vertical and horizontal axes often alternate to form a pattern, as in Pl. clxvi, fig. 12. The degeneration of this motive into a mere saltire is illustrated in Pl. clix, fig. 8; and probably Pl clx, fig. 9, may also be quoted in this connexion. The double-axe motive is also conspicuous in various combinations, in Pl. clxvi, fig. 7, Pl. clxvii, fig. 7. A saltire with a vertical line through it, as Pl cxi, fig. 21, is a very common decoration for jar-handles: this may originally have been a picture of a double axe. Pl clix, fig. 14 is a roughly painted example associated with panelled zigzags; fig. 17 is a neat example of somewhat similar design, but strange to say (for so well-painted a specimen) it belongs to the Fourth Semitic Period.

(11) *The Fret*.—This is comparatively rarely to be found filling a large space, as in Pl clx, fig. 14: but is a very common form of decoration for lozenges and triangles, as already stated. In the latter case it is usual for the parallel lines in one direction to be black, and those in the other direction red.

(12) *The shaded zigzag* (  ), a kind of imitation of basket-work, is not common. An example is to be seen in Pl clx, fig. 7. See also Pl. clxvi, fig. 4. Pl. clxvi, fig. 8 belongs to the same family.

(13) The *anchor-like* device on the neck of Pl clx, fig. 1 is unique. Fig. 5, on the same Plate, is too broken for its true pattern to be determined.

(14) Rows of C or V lines, fitting into one another, between vertical lines—taking in fact the place of panelled zigzags—are sometimes to be seen. See Pl. clxvi, fig. 5, which also shews a curious treatment of spirals; also fig. 11 on the same Plate. The ladder-like design with crossbars alternately red and black, on the sherd of a cylindrical pot, Pl. clxvi, fig. 14, may be mentioned here.

(15) A common form of ornamentation in Third and early Fourth Semitic bowls is shewn in fig. 346. This consists of a zigzag between lines crossing the upper surface of the bowl, and, intersecting it at right angles, a single line with a kind of mop of strokes at each end, apparently a degenerated palm-tree. This pattern recurs over and over again with very little variation. A diagram of two rare varieties is shewn in fig. 347. Another variety is seen in Pl. clxvii, fig. 10, where there are spirals beside the palm-trees. I have called this the "palm and panelled zigzag" ornament; it is so common and well defined that it seems to need some distinguishing name.

(16) *Dots* are much less common as motives than are lines or zigzags. The row of dots in Pl. cxl, fig. 18, is quite unusual, which is also uncommon for the "fattiness" of its slip and paint, and for the appearance of the grits in the ware shining through the slip, so to speak. A single dot will be seen at the top of the zigzags in Pl. cxl, fig. 19, and the spaces between the angles of the zigzag and the flanking lines are filled with dots in Pl. cxl, fig. 22. When this is done the dots are often of a different colour, as the example quoted shows. Pl. clxv, fig. 4, with one red dot added to the black dots is curious.

Some patterns are anomalous or so broken that it is impossible to tell exactly what they were like when complete. Such was Pl. cxl, fig. 17, which is in a peculiarly "raw" and crude red colour.

The other geometrical patterns shewn in the Plates, which give a fairly representa-

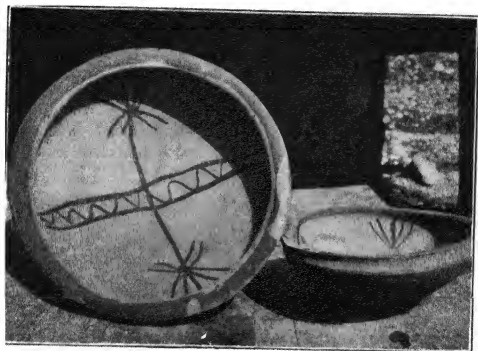


FIG. 346.—THE "PALM AND PANELLED ZIGZAG" PATTERN

tive series of types (*EP*, plates 36-42 may also be consulted) will all be seen to be modifications of these, principally produced by contamination with other motives. Thus, the peculiar scissors-like figures in Pl. clxvii, fig. 17 is the double-axe reduced to a saltire and decorated with dots on its surface: Fig. 11 in the same Plate shows row of lozenges or triangles to which claws are transferred from the bird patterns presently to be described. Of some interest is Pl. clxvii, fig. 16, where the artist has hit upon the *swastika*. But I do not for a moment believe that this is anything more than an accident, or that we are to find any solar symbolism here, whatever the *swastika* may mean elsewhere.

We may now pass on to the representations of natural objects, which, however, are almost as conventional as the purely geometrical designs.

(17) *Tree* and other vegetable motives are rare. There is a distinct "phyllomorphic" feeling in Pl. clxvi, figs. 4, 10, though the designs have been reduced to

a geometrical form and have already been described as such. It is evident that Pl clx, fig 6 bears rude conventionalized representations of growing plants, which may shed some light on the anchor-like figure of fig. 1: there is also a suggestion of the seven-branched candlestick in these figures. Pl clxv, fig. 5 shews a palm-tree they are not often so conspicuously represented. The filling-in of the branches and trunk with red is so reminiscent of the Second Semitic technique that we cannot doubt that this fragment is very early in the Third Semitic style. The associated group of frets—in which note the alternation of colour already commented upon—is more characteristic of the Third than of the Second Semitic Period. Another palm-tree appears in Pl clxviii, fig 7. It is probable that this design is really a development of the octopus motive, presently to be noticed. It is, however, more frequent to find trees as the subordinate members of scenes containing groups of animals or birds, as in Plate clxv, figs. 1, 2. Compare Pl. clxx, figs 15, 16, and probably Pl. clxvii, fig. 12, which seems to show some plant of the water-lily type. The palm-branch (with reversed fronds) may be seen in Pl clxvii, fig. 16.

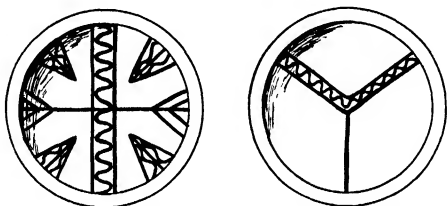


FIG 347—VARIETIES OF THE "PALM AND PANELLED ZIGZAG"

(18) *Marine creatures* are rare. Pl. clxvii, fig 8 may possibly be a degeneration of the fish which is common on the Second Semitic bowls: the fragment is too broken to decide. There can, however, be no doubt about the octopus in fig 348, which is clearly a degenerate copy of some of the wonderful designs which the Cretan potters developed from this creature. This is a late specimen, perhaps Fourth Semitic.

(19) *Birds* form by far the commonest of the naturalistic decorations of Third Semitic Pottery. There are several varieties, the most frequent of which is shewn in Pl clxv, fig. 9. This pattern recurs over and over again in the metopes of frieze patterns. Other examples will be seen in Pl. clxiii, figs 1, 3, 7 (where, as sometimes happens, the bird has no feet). Pl clx, fig 4 (a strangely rude example). another singularly distorted specimen is Pl clxvii, fig 12. In Pl clxvi, fig 6 there seem to have been two such birds, one over the other. Notice Pl. clxv, fig. 11, where the shape of the bill suggests that the artist had a flamingo in his mind. The red colour almost always used on the breast also points to this bird, though, on the other hand, the legs are always shewn too short. Pl clxvii, fig. 15 shews the head of a similar bird, with a red zigzag depending from it. I have not noticed

a similar example elsewhere. The cross (instead of an eye) in the head, Pl. clxviii, fig. 8, is unusual, as also is the ladder-like treatment of the neck, fig. 9 on the same plate.

Smaller birds sitting on or flying round trees, as in Pl. clxv, fig. 1, are sometimes



FIG 348.—OCTOPUS PAINTED ON A POTSHERD

drawn, but this is much less usual than the "flamingo" type. These small birds are always drawn with a uniform wash of colour, never in outline and never with the ornamental details—polychromy, geometrical decoration and the like—that distinguish

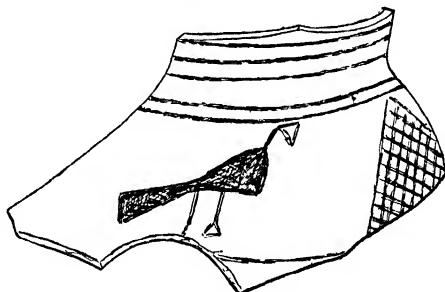


FIG 349—BIRD, PERHAPS A PEACOCK, PAINTED ON A POTSHERD

the flamingoes. The colour adopted is almost always red, though a black bird of the same kind is shown in Pl. clix, fig. 6.

Quite exceptional is the bird figure—unhappily incomplete—Pl. clix, fig. 11. This is a well-drawn representation of a bird in flight, the outline *incised and filled with white*, the body red. Pl. clxvii, fig. 13, also a fragmentary specimen, gives

us another variety of bird, but it is impossible to say how it was finished. There is an Assyrian "feeling" about the radiating wings Fig. 13a is another fragment of the same vessel

A different kind of bird is seen in fig. 349, where fretted triangles divide the space, with peacocks (?) between them. Several other fragments of this vase were found shewing that the pattern recurred in the frieze. It is in brick-red ware, with the decoration in dark Indian red lines. Compare the somewhat similar birds Pl. clxvii, fig. 17

(20) *Animals* are much less common than birds, and are always very rudely drawn. They generally are represented, like the birds just mentioned, with a uniform wash of colour (see Pl. clxv, figs 1, 2), though occasionally polychromy is resorted to, as in fig. 6 on the same Plate. Horned animals (probably goats or ibexes) are the favourite subject, when the species can be recognized at all. Two such animals are shewn in Pl. clxv, fig. 2, feeding on a tree, Pl. clxvii, fig. 1 shews a curious linear group of a mother-goat and its young. The red rectangle underneath the black animal figures is a strange detail on this sherd. Fig. 5 on the same Plate also represents a goat. Very rude and unrecognizable animal figures are to be seen in Pl. clxvii, figs 2, 4, Pl. clx, fig. 16—possibly the indefinite pattern fig. 13 may also be meant for an animal—Pl. clx, figs 7, 8, 9; Pl. clxvi, fig. 1. Pl. clxviii, fig. 3 shews a fragment with the hindquarters of an animal having a tufted tail. Figs 4, 5 were found together in a cistern, and possibly belong to the same vessel. It is not common to find animals and birds together on the same sherd.

(21) *Human figures* complete the series. These are excessively rare. Pl. clx, fig. 6 and Pl. clx, fig. 12 were, I think, the only examples found. The loin-cloth in the first of these is the only point to be noted about them. The colour in the second was red.

Of the way in which these various motives were combined, numerous specimens among those already referred to may be mentioned. We may also refer to Pl. clxviii, fig. 1, which is an especially fine example. See also Pl. clxvii, figs 6, 14.

(vii) **Potters' Marks** are of the same character as in the preceding period. Stamps from scarabs are however less common, and there is a greater variety of nail-marks. For these see Pl. cxc, figs 42-66. Besides these were found in this period specimens of nos. 1, 2, 20 (with *three* bars), 25, 40, 41, and a variety of the last with the upright bar oblique. Figs 43, 44 were found side by side on a larger sherd of red ware, but both were also found independently of one another on jar-handles or (the latter) on the underside of the disc-base of a bowl. Fig. 45, an Old Hebrew *aleph*, is one of the earliest cases of a mark resembling an old Hebrew letter. One or two handles were found impressed with what proved (when a wax impression was made of it) to have been a complicated knot of cord. The unclosed circle Pl. cxc, fig. 66 is made by a succession of prods with a stick. Several potters' marks were made in this way. Fig. 88 is either late Third Semitic or early Fourth.

(viii) **Pottery Groups**—There are not so many good pottery groups in this as in the preceding period. We may, however, refer to tombs nos. 7 (Pls. lxiv-lxviii), 9 (Pls. lxx, lxxi), 30 (Pl. lxxvi), 58 and 59 (Pls. lxxx-lxxxv) as examples.

## E.—FOURTH SEMITIC PERIOD

(i) **Foreign Imports.**—At the beginning of this period small ointment-pots in brown ware, highly burnished, were imported from Cyprus. These were imitated locally in large numbers. Otherwise the potters had no inspiration from foreign sources, and being themselves devoid of any gift or desire for originality, their work is almost entirely a degenerate reminiscence of the Aegean influences felt during the two preceding periods, and is artistically dead. The ware is coarse, the shapes are ungraceful, and the decoration of the great majority of vessels is limited to rough burnishing and plain painted lines.

The imitation of a Mycenaean vessel with three ear-handles, Pl. clxxii, fig. 1, which was found in a Fourth Semitic cistern, is rather belated: we should expect the type to appear in the Third Semitic. The conical vessel Pl. clxxiv, fig. 11 is based on the same form; it had *four* (not three) ear-handles, all of them broken off, and the mouth was attenuated to a short cylindrical neck.

The four small vessels Pl. clxxii, figs. 4-7, found together in V 28, are evidently copied from Cypriote originals. Fig. 5 is painted brown on the top, and below burnished with horizontal lines.

(ii) **Technical Processes.**—These are identical with those of the previous period. A lentoid vessel, *hand-modelled*, was found in V 13, it was 4½" high. It is unusual to find so large a vessel made without the wheel. Pl. clxxii, fig. 2 is a rude hand-modelled cylindrical cup. The small rude oval vessels Pl. clxix, fig. 1, Pl. clxxi, figs. 7, 17 are also examples of hand-modelling, so is the curiously irregular vase Pl. clxix, fig. 22, which is evidently an imitation in black ware of a Cypriote vessel such as Pl. lxiv, fig. 1. The small hand-modelled object Pl. clxxi, fig. 9 is probably merely a clay pin-head. Pl. clxxii, fig. 20, the base of a small jug, is perhaps the most remarkable example of knife-trimming which was found in the whole mound.

(iii) **Ware.**—The ware is as a rule coarse and gritty, usually rather hard-baked; but there is a considerable variety of clays, of all degrees of grittiness, and burnt to various colours and degrees of hardness. On the whole it seems to get coarser as the time proceeds. Besides the black ware which is used for the majority of the small ointment pots, described below, shapes (1), there seem to be four clays principally used.

(1) A light sandy homogeneous clay, with a tendency to be powdery in the broken section.

(2) Also sandy, but with rather large granules, red in colour. This does not powder in the broken surface.

(3) A clay with white limestone granules scattered through it, hard-baked, with few air-holes.

(4) A clay with flint grits, flaky in appearance owing to the numerous air-holes taking the shape of flat planes parallel to the surface of the vessel.

(iv) **Shapes.** (a) The large jars with one handle and the "umbrella" base persist into this period, and are fairly common. But there is a tendency to broaden the base of vessels in the Fourth Semitic and Persian Periods, while still retaining its convex outline. Thus the large jars of this period—especially toward its close—are apt to



be conical in general shape, instead of inverted conical as in the Second and Third Semitic Periods (See Plate clxxv., fig. 5.) The cylindrical jars with pointed base and more or less flat shoulders, which will be described in Division F, first begin to appear about the Persian Period.

(b) One-handed jugs on ring or hollow disc-base, inverted conical body, long concave neck, wide-spreading mouth, one loop-handle. Pl. clxix, fig. 18 is a good typical example. Pl. clxx, fig. 2 differs in having a flat base instead of a disc-base. A smaller example with rounded base appears in Pl. clxx, fig. 7, and a still smaller specimen identical in shape with the last in Pl. clxxi, fig. 4. With the latter compare Pl. clxxiv, fig. 15, and the spouted example fig. 16. A ring is incised surrounding the side of the last named. Pl. clxxi, fig. 12 is another small example with a ring-base; Pl. clxxii, fig. 9 is similar, with three red rings painted on it. The body in these latter specimens is globular rather than conical. A squat example, rather early, will be found on Pl. clxxv, Fig. 11; in fig. 10 in the same Plate, the base of which is flat, the curvature is very gentle. In Pl. clxxvi, fig. 10 the type is modified thus: the disc-base is deeply hollowed, the body is double-conical, and the upper attachment of the handle, instead of being on the rim, is on the side of the neck. There is a horizontal panelled zigzag surrounding this vessel, painted in red.

(c) Small jugs. Of these there is perhaps a greater variety than in any of the preceding periods. All are, however, ungraceful in shape and clumsily made, and either hand-modelled or formed on the wheel. The varieties of shape can be studied best by a glance over the Plates, from which it will be seen that they may all be treated as variants of the one-handed jug which in one form or another persists from the first, and which, inasmuch as it is the commonest form in every stratum and has a well-marked type peculiar to each period, is really the most important key to the chronology of the pottery and associated objects. In the Fourth Semitic Period this vessel has a blunted base; the body may be either conical, cylindrical (on the whole the commonest), or globular. Examples of these will be seen in Pl. clxix, figs. 3, 11, 13, and 19. Fig. 2, which is rather an early example, has an unusually short neck and wide mouth; the handle in this case is broken off. In fig. 3 the clumsy cylindrical neck, rather long in comparison with the size of the vessel, will be noticed. This is characteristic of the period; the gracefully curved neck and mouth of the Second Semitic, which we saw to be much deteriorated in the Third, is in the Fourth clean gone. A greatly exaggerated example of this will be found in Pl. clxxii, fig. 21. The awkward circular handle, taking the place of the graceful triangular or heart-shaped handle of the earlier periods, will also be noticed—compare Pl. clxix, figs. 11, 13 in this respect. Fig. 4 is of rather a different type, having a very wide mouth and a disc-base. Except in the latter respect it may compare with fig. 13. With this may be compared Pl. clxxi, fig. 2, in which the body is double-conical instead of globular. In Pl. clxix, fig. 8, which has lost its neck and handle, the base is so blunt as to be almost flat, but it has a small conical projection in the middle. Pl. clxxi, fig. 13 is transitional in form between this and the normal example. It is hand-modelled, in reddish yellow ware. In Pl. clxix, fig. 11 the neck instead of being cylindrical, as is fig. 3 just mentioned, expands upwards, but clumsily. Fig. 13, which was found in the same place as the last mentioned, is of the

globular form. Fig. 14, with its flat base, looks like a return to the early type ; it is one of the accidental recrudescences that are occasionally to be found, possibly suggested to the potter by an actual ancient specimen that happened to be dis-



FIG. 350.—WATERPOT WITH THREE EAR-HANDLES

covered. Fig. 19, with a slightly conical base and cylindrical body, has two red rings painted on it. Other examples of the normal type are Pl. clxxi, fig. 3, which is trimmed down with a knife ; and the small example Pl. clxxi, fig. 6. Fig. 11

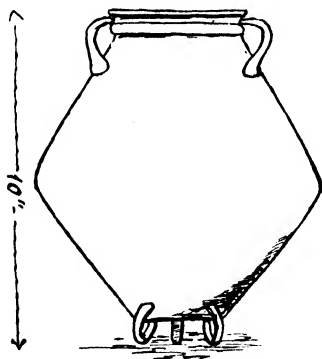


FIG. 351.—WATERPOT WITH THREE FEET

on the same plate, which is ribbed, is of a very late type and no doubt belongs to the Persian Period. It is in light brown ware. Pl. clxxii, fig. 13 is a rude hand-modelled example. It is not very common to find vessels of this kind provided with a tubular spout : Pl. clxxii, fig. 17 is an example.

(*d*) Globular water-pots used for raising water from cisterns. These have usually blunt-pointed bases, swelling bodies, rather wide neck, spouted mouth, and one loop-handle. The normal form is well illustrated in Pl. lxvii, fig. 3. There are a number of varieties, with different forms of bases (pointed, as in the examples in the figure just mentioned; also ring or disc-bases) and different proportions of the various parts. A rare variety with three ear-handles is shown in fig. 350.

(*e*) Water-pots on a flat or ring-base, supported on three loop-feet resembling handles: globular or lozenge-shaped body, slightly moulded mouth, either continuous or circular, one or two loop-handles. See fig. 351: compare also Pl. xliii, fig. 3.

(*f*) Cylindrical vases with rounded base and flat shoulders: there is usually no neck, the mouth being simply a round hole in the middle of the shoulder (as in fig. 352), but sometimes there is a slightly turned-up neck, as in Pl. clxxv, fig. 7. This shape



FIG. 352.—CYLINDRICAL VASE

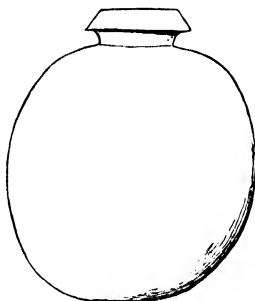


FIG. 353.—SPHERICAL VASE

comes into use in the Persian Period, and persists into the Hellenistic. Some other forms are described in Division F.

(*g*) Spherical vases, on rounded base with short neck, and moulded mouth as fig. 353. This type appears late in this period and persists into the Hellenistic, when it is commonest.

(*h*) Small spherical vessels with flat base and no neck, the mouth being simply a round hole cut in the top of the vessel. There is as a rule no handle in this, which is a late form. Pl. clxx, fig. 5, is a typical example with burnished and combed decoration: in fig. 6 a tubular spout is added.

(*i*) Small pots in black ware, usually with strokes of the burnishing tool roughly "sketched" on their sides, are very common in this period, and extend through its whole length down to the Hellenistic Period. The body is generally globular, as Pl. clxix, fig. 15, or else cylindrical with a conical top and bottom, as fig. 5 on the same plate, or Pl. clxxii, fig. 22. There is a long, slightly concave neck and an expanding mouth—Pl. clxix, fig. 5 well shews this. There is usually one wide loop-handle, but

sometimes this is absent as in fig. 15. Vessels identical with these in shape were also found in red ware.

(j) Lentoid flasks such as have already been described—see Second Semitic shapes (j)—are commonest in this period. As a rule they are of small size, but some large specimens were found. Of these, one was in the Philistine grave no. 5 (Vol. I, p. 296). Another is shewn in the photograph fig. 354. This is about 1' in height. Pl. clxx, fig. 1 has burnished circles upon it. The cross in a circle, as shewn in Pl. clxxi, fig. 10, clxxii, fig. 23, painted as a rule in red, is a common form of ornamentation of these vessels in this period. A much less frequent form of ornamentation appears in Pl. clxxvi, fig. 14, which shews horizontal lines on one side and a *square* spiral (a very rare device) on the other. There were two ear-handles on this vessel in addition to the



FIG. 354.—LENTOID FLASK

loop-handles; the stump of one of the latter remains on the surviving edge, with the ear-handle underneath it.

(k) The jug Pl. clxxii, fig. 12, with broad flat disc-base, inverted conical body, abrupt shoulders, one handle, and concave neck is, I think, unique at Gezer. It is in a brownish red ware.

(l) Globular spouted vessels, with a vertical loop-handle spanning the mouth, such as has already been described under Third Semitic shapes (i), persist into about the first quarter of this period. Pl. clxix, fig. 20 is an example, with two spirals very roughly painted in brown on the cream yellow slip covering the vessel. Fig. 17 on the same Plate shews the neck of a similar vessel, unusually large, and remarkable for having a perforated screen spanning the mouth, as shewn by the dotted lines. Pl. clxxv, fig. 6, also seems to be part of an unusually large vessel of this kind.

(m) A not very common type of vessel is shewn in Pl. clxix, fig. 7. This has an inverted conical body on a ring-base, the top of the cone being concave and pierced with holes to make a filter. A spout at the side serves to pour out liquid. There was a vertical ear-handle, broken off. The vessel may be described with probability as a feeding-bottle.

(n) Inverted conical vessels with short narrow mouth. A rare form. Pl. clxx, fig. 9 is a fragment of one painted with red and black lines. It belongs to the Persian Period.

(o) Jugs with rounded base and conical body. In the normal examples there is a very slight entasis, so that there are no straight lines in the side. short neck, flat expanding mouth with one loop-handle. This form of vessel is commonest in the Hellenistic, and hardly appears before the Persian Period. An example is to be seen in Pl. clxix, fig. 21: here note the clumsy shape, the form of the handle (which when complete must have looped high above the body of the mouth), and especially the ribbing of the sides. In Pl. clxx, fig. 4 there is no entasis.

(p) Two-handled jugs. disc-base, globular body, decorated with painted rings, concave neck, two loop-handles. Pl. clxix, fig. 9 is a good example. It is evidently a direct imitation of the Cypriote jugs, which, as has been said above, were freely imported. This explains its unusual gracefulness. Pl. clxx, fig. 3 has an angular body and two ear-handles.

(q) Jugs with ring-base, globular or double conical body and long neck with spouted mouth, one loop-handle. These, which are too graceful to be the inspiration of native potters, are, no doubt, likewise imitations of Cypriote exemplars. Pl. clxxi, fig. 14 is a small specimen, which, however, has lost its upper part; fig. 22 in the same Plate is the upper part of a larger example covered with yellow slip highly burnished, having some black lines round the mouth. These vessels belong to the earliest years of the period.

(r) Cooking-pots, like Pl. clxx, fig. 13, come in first about the Persian Period. These are made of a porous, hard-baked, and very brittle ware, with disc-base (often absent as in fig. 16), globular body, and wide, slightly concave neck, with two loop-handles which are usually flat and broad and moulded on the outer surface. The sides of these vessels (which as a rule display marks of smoke-blackening) are often in the later specimens ribbed. The lip is thickened, and a groove often runs over the upper surface, so that a vertical section through the side of the mouth would look like the letter **Y** without the knob at the end of the tail. Pl. clxxiv, fig. 14 is a deeper and more massive specimen than usual.

(s) Saucers of the usual cyma shape, which persist in one form or another down from the Second Semitic Period—shapes (n)—are found in the Fourth Semitic. Examples are Pl. clxx, figs 11, 12, which shew varying degrees of curvature. In Pl. clxxiv, fig. 7 is an example with the curves disappearing, and with the outline tending towards a V form: in fig. 19, on the other hand, the curve is turned into a sharp angle. In a cistern two such saucers were found, the one acting as a cover for the other. These are shewn in Pl. clxxvi, fig. 6.

(t) Hemispherical saucers with flat bases (as Pl. clxxiv, fig. 6) or disc-bases (fig. 2 on the same Plate) are perhaps as common in this period as the cyma-shaped bowls

surviving from the earlier period. Fig. 3 was found with a lamp inverted over it as shewn · it has a hollow disc-base. Fig. 10 is a variant with moulded lip and a round base pierced to serve as a strainer

(u) Saucers on trumpet-shaped feet This becomes a very common form in the present period. See Plate xc, xci, where a number of different specimens from the rather early Fourth Semitic tomb no. 96 are illustrated In Pl. clxix, fig. 10 is an example much more ornate than usual · its alternating triangles of red and black are evidently imitated from an Egyptian lotus-pattern. The fragment Pl. clxxi, fig. 15 seems to be part of a vessel of this kind with a number of slots cut in the side of the base and ornamental grooves between them · but the fragment, which is in a yellow ware, is too imperfect for certainty. In débris belonging to the beginning of the period, in trench 15, was found a fragment of a base of a vessel of this kind which must have had six loop-handles, connecting the under-side of the dish with the stem. It was in a drab-coloured but not gritty ware.

(v) Massive V-shaped saucers, usually of hard compact light yellow ware, with flat bases, straight sides, and heavily moulded mouth These appear in the Persian Period or perhaps at the very end of the Fourth Semitic, and last into the Hellenistic, when they are fairly common Pl. clxxiv, fig. 5 is an example. Fig. 9 is another, with a more elaborate moulding round the mouth

(w) Bowls with round base and hollowed rim, like Pl. clxxiv, fig. 1, were not very common This very large specimen was found built into the heart of a house-wall in trench 29. Fig. 17 on the same Plate is a small vessel of the same type.

(x) Wide shallow bowls on disc-base, as Pl. clxx, fig. 15: sometimes with a handle, as fig. 14. The smaller saucer, which is decorated on the outside with combed ornament, and burnt and smoke-blackened on the rim on both sides, is of the same type

(y) Bowls with filtering spouts, like Third Semitic shapes (t), persist in this period. Pl. clxxi, fig. 18 is an example

(z) The large conical bowl with three knobs (Pl. clxix, fig. 12) on the edge in each quadrant and the small conical base, recalls the similar bowl found in Third Semitic débris shewn in Pl. clxii, fig. 9.

(a<sup>1</sup>) Small saucers are if anything more common in this period than in the preceding. Pl. clxx, fig. 10 is an example in compact ware much resembling that of Rhodian wine-jars Pl. clxxiv, fig. 4 is an example remarkable for the thickness of its base. A very small V-shaped specimen of coarse pottery appears in fig. 12 on the same Plate the cyma-shaped fig. 13 is one of two (the other was hemispherical on a ring-base) found together above the top of the inner wall.

(b<sup>1</sup>) Minute vessels (toys or possibly receptacles for *kohl*) are common in this period as in the last. Pl. clxix, fig. 6, which is hand-modelled, is a specimen of such a saucer. The other rude hand-modelled vessels, noticed above under *Technical Processes*, may best be classed with these.

(c<sup>1</sup>) Circular pottery tubes, with a row of pomegranates, birds, cups, or lamps standing upon them, which were noticed in the Third Semitic Period, are also found in the early part of the Fourth. Pl. clxxii, fig. 15 is a fragment of one with the lower part of a cup upon it. Pl. clxxv, fig. 9 is such a tube, which has lost its

appendages. The section is circular. Pl. clxxvi, fig. 1 is an example of a pomegranate broken from such a tube; and fig. 3 in the same Plate is apparently a variant in which there were tubes ending in vertical cups radiating from a central ring. What fig. 11 on this Plate may have been cannot be said: it seems to have been a ring of pottery, with a projection at the side, but the section on each side of the projection varies curiously. There are two perforations running through the object. Fig. 2 is not to be classed with these: it is evidently one of the ring-formed lentoid vessels, as Third Semitic shapes (*I*), with ear-handles instead of the usual loops. Fig. 12 is the rim of a dish with a tube running through it; the projection shewn is a spout running from the tube. It is not clear how this was worked, though the filtering rim fig. 264 may be compared.

(*d*<sup>1</sup>) The ordinary types of lamps partake of the same essential characters as

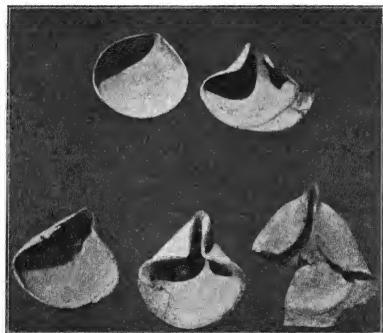


FIG. 355. —DEVELOPMENT OF LAMPS

in the foregoing periods; but the closing of the flanges proceeds still further. In fig. 355 is shewn a succession of lamps in which the process can be traced. The first is Second Semitic, the second and third Third Semitic, and the fourth Fourth Semitic. The fifth is a flat disc with flanges almost closed, which appears about the Persian Period: to the same period apparently belong the lamps with thick bases such as are shown in *EP*, Pl. 66, fig. 4.

(*e*<sup>1</sup>) Lamps with multiple radiating spouts, like Pl. clxxv, fig. 1, are not very common. There is no doubt a significance in the fact that there are *seven* spouts, which is the usual number.

(*f*<sup>1</sup>) Baking trays, with perforations on the under-surface, of the kind already described, are common in this period.

(*g*<sup>1</sup>) Filtering discs. Pl. clxxi, figs. 16, 19 represent a type of object found in this period, consisting of a flat disc, with perforations through, surrounded, but not always, by a slightly raised collar (present in fig. 19, absent in fig. 16). Over this

is a loop-handle, which, however, is usually broken away, as in the specimens figured. This may have been intended for inserting in the mouth of a vessel for filtering purposes, to avoid the obvious inconvenience that a fixed filtering screen, such as is sometimes found, prevented the vessel from being cleaned. It is, however, also possible that these are a kind of brush-handle, like the objects shewn in fig. 299. The fragmentary disc Pl. clxxi, fig. 20 can, however, only be part of a filter, as the holes are too large for any other purpose.

(h<sup>1</sup>) The fragment Pl. clxxii, fig. 27 may possibly be a stand for a small jug. It is shaped like a bowl, with three spikes sticking up inside, curved outward, so as to adapt themselves to the curvature of a vessel like fig. 17 on the same Plate. This may also be the last survivor of the jar-stopper with two loop-handles referred to under the previous periods.

(i<sup>1</sup>) Fig. 356 represents a rudely modelled massive trough of yellow ware, about 10" in diameter, with a spout pierced through the upturned brim. It is flat, of an irregular oval shape.



FIG. 356.—POTTERY TROUGH

(j<sup>1</sup>) Double vessels. There is in this period a considerable variety of these remarkable forms, the use of which it is difficult to understand. There are two main classes: those in which the two components are entirely separate, and those in which there is a communication between them. To the former class belonged Pl. clxx, fig. 8, which was very fragmentary. It evidently consisted of two vases 8" high, joined together, and also connected by a trifold handle on one side and by a bar at the bottom. There is no corresponding handle on the opposite side. The ware was of a drab colour, coarse, though not very gritty, and painted in red. Pl. clxxiii, fig. 1 is a fragment of a double vessel united by a bar. It is in light yellow ware.

(k<sup>1</sup>) The small pottery object Pl. clxxiv, fig. 8 seems to be part of an oval dish, something like a modern pen-tray, and possibly it was meant to serve some such purpose (for holding pins or the like). Pl. clxxv, fig. 2, is a larger fragment of an analogous object.

(l<sup>1</sup>) A few square vessels were found, all, however, fragmentary. Pl. clxxv, figs. 4, 5 are examples. Of the second of these only two pieces remained, which do not fit together. The uppermost measures 3" high by 9" broad, the lower



9" high by 11" broad. It is possible that these were receptacles for inscribed tablets.

(*m*<sup>1</sup>) Two objects of pottery may here be mentioned, not strictly vessels, but because their use is problematical, and it would be hard to find a place to mention them elsewhere. The one is the neatly made, cushion-shaped object Pl clxxvi, fig. 4, which looks almost like a closed tablet-envelope, but is too small and too solid. There are strokes in the surface as shewn. The other is the bar of drab-coloured pottery fig 18, on the same Plate, with expansions at each end. I have no explanation to offer for either of these objects.

A fragment or two of the "cup-and-saucer" vessels were found in Fourth Semitic debris, but they are foreign to this period and can scarcely be counted among its typical vessels.

(v) **Details.**—The rounded base to jugs, so characteristic of this period, was

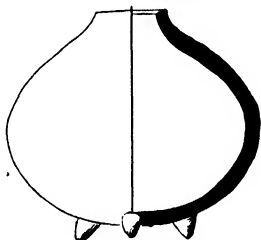


FIG 357—VESSEL STANDING ON THREE FEET

occasionally anticipated by earlier potters, as in a specimen found in III 18. These are, however, merely peculiar individual specimens.

The "umbrella" base, already described, is the commonest for large jars, ring-bases or hollow disc-bases for small jugs. At the beginning of the period hollow or flat disc-bases seem to be more common, in proportion to ring-bases, than they are at the end. The latter, indeed, become almost universal\* as we approach the Persian Period. The hollow in the ring-bases of some ornamental bowls in this period are carried up sometimes into a cone, like the "kick" of a modern wine-bottle. This, however, is uncommon: Pl clxxii, fig 8 is an example. The knobbed base Pl. clxxvi, fig. 7, recalling (except in shape) the bases of Second Semitic vases, is very rare in this period.

Some few vessels were found standing on three small conical feet. Such is fig. 357, a globular vase 3½" high. Only half of it was discovered: it was full of lime.

The handles of large jars in this period are most frequently longer horizontally

\* Of course excepting in the large number of vessels with convex bottoms

than vertically. This peculiarity is very distinctive of the Fourth Semitic Period, and is rarely anticipated in the earlier pottery.

Sometimes, both in this and in the preceding period, vessels were found with a loop-handle of the ordinary kind, but with a perforation running vertically through the handle just outside the upper attachment. This may have been for a string to suspend the vessel, the rotundity of its body making it inconvenient to suspend it by the handle itself. Not so commonly the perforation is horizontal, running through the attachment and the inner face of the neck of the vessel.

The twist of two or three strands in the loop-handles of vessels, which we saw to be used ornamentally in the last period, is now *imitated* by spiral grooves



FIG. 358.—WATERPOT SHOWING BIFURCATED HANDLE

running up the side. Pl. clxxi, fig. 21 is an example of this. Sometimes the loop-handle consists of three parallel and equal strands, of which the two outermost are plain and the central one decorated with a twist. One fragment was found in which a rudely modelled and much mutilated human figure decorated the lower attachment of the loop-handle.

The lower attachment of loop-handles is often bifurcated in this period and ornamented with knobs. Pl. clxxvi, fig. 13 is a curious example. Another excellent specimen is the water-pot fig. 358. The fragment shewn in Pl. clxxii, fig. 3, shews several points worthy of notice. It illustrates the broad flat handles with slight mouldings which are common in large vessels of this period. It also shews three knobs, survivals of a button-handle, and now reduced to ornamental appendages

on the top of the upper attachment: compare the Third Semitic example Pl clxviii, fig. 12

One of the simplest and commonest forms of button-handles is shewn in Pl clxxvi, fig. 8: it consists merely of a short rib running vertically downwards (like the upright bar of a T) from the rim of a bowl. In Pl. clxxiv, fig. 18 a button-handle is to be seen, which consists of a cylindrical bar of pottery adhering to the sides of the bowl, and terminating with conical expansions. This saucer (a flat example of the hemispherical shape) is covered with a yellow slip and the rim is painted red. Round the underside of the base two concentric circles are incised. In some saucers of superior ware an ornamental extension of this form is to be found, of which an example, in slightly burnished red ware, will be seen in Pl clxxi, fig. 8. This is a cylindrical bar of pottery adhering to the side of the vessel and running round nearly half its circumference, with broad flat spatula-like expansions at each end. This appendage is evidently more ornamental than useful. It is an interesting example of the degeneration of a serviceable detail into a mere ornament. This form of button-handle is sometimes ornamentally treated, as in Pl clxxv, fig. 3, where there are groups of three slips of pottery, three in number, crossing over the back of the bar and pendent below. The button-handle, Pl. clxxv, fig. 8 is very peculiar. It is shaped like a double handle with an ornamentally prolonged lower attachment: but is horizontal and is solid, not a loop. It belongs to an early stage, and indeed is probably of the Third Semitic Period.

Ear-handles are not very common in this period. An example is shown in fig 350 above

The fragment shown in Pl. clxxi, fig. 1 is peculiar. It is too broken to make it possible to determine what the exact form of the complete vessel may have been, but it looks as though there had been a bowl with a handle having a cup-like depression at the end. It may perhaps be classed with "double vessels," but if so it differs from all the others in having the two component parts different in form and size.

Tubular spouts, which are perhaps commoner in this period than in any other, are generally short and narrow, with fairly wide bore; the tube on the jug Pl. clxxii, fig. 17 is a good typical example. It is not common to find them so thick as fig. 10 on the same Plate. On the other hand, a rounded nosing as in this tube is very frequent.

Jar-stoppers are of the same varied and makeshift character as in the previous periods. There are a number of the problematical oval stoppers which are difficult to account for: they may have some totally different use, or they may be meant for vessels made of some material more perishable than pottery. As I have already said, no vessels with oval mouth, such as these stoppers would fit, were found—certainly nothing to account for the tolerable frequency of these objects. Pl. cxci, fig. 21 is an example of a sealed jar-stopper; a lump of soft clay pressed into the mouth of the vessel with a rectangular seal (drawn in fig. 21a) stamped four times upon its surface. There is also a small oval depression that looks like the mark of a scarab sealing, but it was impossible to make anything of this. Fig 361 no. 2 is a seal found on a similar jar-stopper

(vi) **Ornament.**—(a) *Combed*, not common. A specimen will be seen in the globular vessel Pl clxx, fig. 5. Pl. clxxii, fig. 18, in black ware finely combed with zigzag lines, is an unusually elaborate example.

(b) *Burnished* is limited as a rule to random scratches on the sides of vessels. In a few jugs a line of chevrons is traced on the side, but this is exceptional in the majority the lines have no regularity.

(c) *Moulded* ornament is more important in this than in the last period. The decorative rope-moulding is, however, scarcely found, in its place are coarsely executed alternations of horizontal ridges and hollows. Dark-coloured paint is sometimes used to emphasize the depth of hollows, as for instance in the fragment Pl clxxi, fig. 5. or, *per contra*, burnishing may be used to emphasize the height of ridges, but this is less common. Shallow mouldings running down the backs of loop-handles begin to appear toward the end of the period.

The fragment of wave-moulding Pl. clxxvi, fig. 16 was found just under the surface. It looks rather like a piece of earlier ware that has somehow filtered up from beneath: so artistic a fragment would not be looked for later than the Second Semitic Period.

In Pl clxxii, figs 24, 25 are two fragments in which there are projecting knobs, possibly attempts at imitating lotus-leaves. The first of these is the side of a bowl in compact brown ware painted red. Over every second of these projections the rim seems to have been carried horizontally into a lump. Fig. 26 on the same Plate shews a similar row of conical knobs.

Ribbing, though there may be some sporadic examples in the earlier periods, definitely begins to appear as an ornamental treatment of vessels in the end of the Fourth Semitic Period, or perhaps more accurately in the Persian Period. It takes several forms. One of these is a waving of the whole section of the wall of a vessel, so that there are corresponding alternations of ridges and hollows on each side—the ribbing being *repoussé*, as it were. But as a rule it is on the one side only. In the Persian Period it may be of a saw-tooth section, or else (as in Pl. clxxxvi, fig. 1) may consist of broad grooves, rectangular in section. It may also be a gentle waving of the surface. The hard mechanical ribbing of the Roman and Early Arab Periods can never be mistaken for that of the Persian and Hellenistic.

(d) *Incised* ornament unusual. Pl clxxii, fig. 14 is an example (probably of the Persian Period). It is a fragment of a bowl in Venetian red ware, on which is a broad groove, probably surrounding the base in a circle. Small side-strokes flank the main groove after the fashion of a herringbone. In fig. 16 of the same Plate there is a nicked moulding, and also a zigzag pattern traced with a stick.

Some examples of the use of impressed *dots* as ornament were found in this Period. Pl clxxvi, fig. 9 is remarkable for the large dots in vertical rows of which it consists, as well as for the shape of the vessel of which it formed a part—a square tray supported on feet at the corners. In fig. 17 on the same Plate is the neck of a vessel (the top broken off) ornamented by slightly curved horizontal rows of small points.

Another form of incised ornament—rather late, and perhaps not older than the

Persian Period—is shewn in Pl clxxvi, fig. 19 This is a series of vertical grooves surrounding the vessel, which is painted red.

Special note should be taken of the incised spiral, on the base of a vessel of yellowish brown ware found in V 29, Pl clxxiii, fig 17.

(e) *Painted* ornament as a rule consists merely of rings surrounding the vessel—some broad, some narrow. Sometimes the surface is wholly or partly painted, as Pl. clxx, figs 12, 17 More complicated devices are rare, and are evidently degenerations of the patterns and motives enumerated under the Third Semitic Period.

Sometimes mere irregular dots or dashes of paint are found on vessels of this Period. Pl. clxxii, fig. 11 is a sherd of a large jar of bright reddish-brown ware with spots of red upon it

The motives of the Third Semitic painted ware survive, though in a degenerated form Pl clxxiii, fig. 3 shows a plain *spiral*: note that there is no special treatment of the eye, and also that the spiral is not closed tangentially, as would most likely be the case in the previous period. The contamination of the spiral with the ladder-device, fig 5 on the same Plate, is also noteworthy This belongs to the beginning of the period It degenerates into the circular ladder of fig 9, which is painted in dull brick red on a white glaze. *Zigzags* are shewn in the extraordinarily careless and irregular specimen Pl. clxxiii, figs 10 (the broad brim of a very large shallow bowl) and 11 in the one the colour is red, in the other it is red and black on a buff ground. *Groups of lines* in various positions are illustrated in figs 7, 8 on the same Plate. Here also the roughness and carelessness of the work are manifest. *The double axe* motive seems to be totally forgotten *The palm and panelled zigzag* treatment of bowls is very common in this period, especially in bowls that form parts of lamp-and-bowl deposits. As a rule the normal type, as shewn in Pl clxxiii, fig 6, is followed, but sometimes there are variations, as in the ornate specimen in black and red, fig. 4 In this example there is a cream-coloured slip on the bowl: as a rule the ornament is applied directly to the surface of the ware, which is of a Venetian red colour, the decoration being in dark Indian red In fig 4, in accordance with what has already been said (p 151 above) regarding the relative opacity of the colours used, the red lines pass over and completely eclipse the black at all crossings Note the single button-handle. Almost all the saucers and bowls decorated with this pattern are of the outline shewn in the illustration. The fragment Pl clxxiii, fig 2 is too small to permit us to say much about its design

The *bird friezes*, so characteristic of the Third Semitic Period, disappear altogether in the Fourth Pl clxxiii, fig 15 seems to be a kind of hieratic version of this form of decoration Fig 14 shews a bird in white, in front of a palm-tree (?) in white and black, on a red ground The distribution of colours on this sherd, which is early in the period, is unusual. The fragment, fig 13, is one of the few shewing a figure of an animal, apparently a horse. The top edge being broken it is impossible to say of what the loop above formed a part Two animals also appear (dark brown on light buff), on the fragment Pl. clxxiii, fig. 15. Pl. clxxiii, fig. 16, which is made up of common elements, is one of the most satisfactory specimens of painted ware from this stratum. Fig 12 is a small fragment of a Cypriote vessel found in V 29. it may perhaps have had a figure of a flying bird upon it

But, as has already been said, the great majority of the coloured sherds of this period are decorated merely with horizontal rings

On a very few sherds of this period are found for the first time a slag-like glaze instead of a slip, which gives a china-like appearance to them. This is of a green, greenish-blue, or dirty white colour.

(vii) **Potters' Marks.**—Scratched devices are less common in this period than in the three preceding. They are of the same character as those found in the earlier ware, and are seen on Plate cxc. The four marks in fig. 81 were impressed with a stick which had a slight depression on its end. Besides the specifically Fourth Semitic marks figured in the Plate, specimens were found in this period of nos 1, 2, 34, 36, 37, 41, and 45, the latter both with and without a stroke under it. The absence of characters drawn from the old Hebrew alphabet is noteworthy.

The scratches on the jar-stopper of red ware, Pl. cxc, fig. 9, which was found in V 6, are probably ownership rather than potters' marks, taking the place of the seals sometimes found on the covers of vessels.

Scarab stamps disappear, but the impressions of other seals now become fairly common as potters' marks. These consist either of simple devices (stars, pentacles, etc.), or of names in the Old Hebrew script. As compared with the results of the excavations of the more southern Shephelah mounds, the number of inscribed stamps found at Gezer was disappointingly small, although every jar-handle found during the whole course of the work (I suppose at least 150 or 200 *per diem*) was brushed clean in search of them.

Two copies were found of the stamp shewn in fig. 359. There are five letters, not as usual in a horizontal line, but between the angles of a pentacle with a dot in the middle. A similar device, but with conventional ornaments instead of letters in the angles, was found on a jar-handle from Tell Zakariya (*EP*, Pl. 56, fig. 44). The inscription is not easy to read: some of the letters are ambiguous, and there is no indication of the order in which the letters are to be taken, or the point at which the inscriptions begin. The letters appear to be reversed in the impression, having been made direct on the seal. Certainly the **ב** is reversed, the others may or may not be so. A V-shaped letter in the upper left-hand angle (as the seal is drawn in the figure) may be **ל**: the next below is **ש**, then comes **ב**, following which is a letter that may be either **ד** or **י**, after which there is another that may be either **י** or **ד**. In *QS* (July 1904) the Editor suggests reading **לשבי**, connecting the name *Sibmi* in some way with that of the town of Sibmah in Heshbon. The reading of the inscription is, however, not sufficiently certain to admit of dogmatism.

On the now well-worn subject of the "Royal Stamps" I need not here enlarge. Not many specimens came to light: with one exception they added no new material. The one exception was an example found in the cistern in IV 11, (fig. 361, no 1), bearing the two-winged symbol and the name **ממשה**, but not shewing any trace of the word **למלך** which occurs in all other specimens\*.



FIG. 359—  
POTTER'S  
STAMP WITH  
HEBREW LET-  
TERS

\* It is evident from the position of the word **ממשה**, which occupies the place where

Some speculations with regard to the interpretations of these stamps were put forward by me in *QS*, 1905, pp. 243, 328. I now see, from fuller experience of stratification, that I dated them far too early; and—somewhat against my own prepossessions—I have been forced, by a consideration of the contexts in which they are found, to the conclusion that those scholars are right who on palaeographical grounds assign them to about the Persian Period. The fact that a ממשת handle was the *only* fragment not certainly of the Persian or Hellenistic Period found in the silt filling the great Central Reservoir can hardly be accounted for satisfactorily in any other way. This of course vitiates many of the deductions that I offered in the paper referred to: and indeed it seems to shew that the *melek* of the inscription, whoever he may be, is not the King of Judah—though I am not wholly convinced that we cannot date them to the very end of the Hebrew monarchy, in which case the seal with the inscription to the king omitted might belong to the years immediately following the fall of the last king of the dynasty. On the whole ממשת seemed to be the name most frequently found, and ה'י the least common, at Gezer.

There remains, however, fixed in my mind the certainty that the potters who made the seals are referred to in the obscure genealogy followed by the allusion to the "potters [who] dwelt with the king for his work," 1 Chron. iv. 16-23: and that the names Ziph, Soco, Heber, and Mareshah, there occurring, should be corrected with the aid of the contemporary testimony of the jar-handles to Ziph, Shocoh, Hebron, and something like "Memshath." Notwithstanding the adverse criticisms to which my suggestions have been subjected, I am still inclined to see the names of men rather than of places in these four names, and to believe that the genealogy in which they occur can be reduced to order in some such manner as I have suggested in the paper quoted. Finally, I am still unable to find any sense or coherence in the allusion to "Bithiah, daughter of Pharaoh" when viewed as a genealogical detail, quite apart from the huge historical improbability that a lady so exalted should stoop to wed into an obscure family of S. Palestine; and I still incline to seeing in this inexplicable Egyptian princess not a person, but a veiled reference to the scarabaeus, so conspicuous on the potters' stamps.

Some handles were found at Gezer, as in the Shephelah *tells*, bearing the "royal stamp" and in addition a stamp consisting of two concentric circles with a central dot.

With these remarks I leave the subject of the "Royal Stamps," waiting till future digging in some of the Shephelah *tells* may provide further material to elucidate their mysteries.

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למך is usually found, that the latter word never was written on this particular seal. In several seals which had למך at the top, but no trace of the other name, it is not so certain whether the latter had always been absent, or had been lost by injury. In some cases there seemed to have been an attempt made to destroy the inscription on the seal, the letters being wholly or partly cut away. One jar-handle was found bearing a "Hebron" stamp with the two-winged figure, which had been impressed, then inverted and impressed again on the same spot, the two impressions being confused together. This also looked like an attempt to render the inscription illegible.

In a shallow ditch cut under my direction to limit the boundary of the village cemetery so as to prevent interments in ground required for excavation, a seal was found with obscure traces of an inscription in two lines. The lower line was insufficiently stamped from the first, and was in consequence quite illegible: the upper line (fig. 360) was almost as difficult to make out. I thought I could read *תושב* or *תושן*, but certainty was impossible. Another jar-handle, picked up on the surface of the ground, had apparently an inscription in seven letters, four in the upper line, three in the lower: but only the first two letters, *לר*, could be deciphered. Another was found with a seal which, though stamped twice, was totally illegible. Lastly another obscure inscription was found in the same cistern as the *ממשה* handle above described. This, after a considerable amount of trouble expended upon it, proved to be a duplicate of the *לעזר הני* already found at Tell Zakariya (*EP*, Pl. 56, fig. 28). Except one or two stamps so late that they are recorded in the following section, this completes the record of Hebrew jar-stamps from Gezer. Some ornamental devices were found stamped on similar handles. These, so far as they can be certainly deciphered, are also shown in fig. 361. A few others were found, but they were so ill stamped, or so rubbed, that nothing certain could be made of them. The large square stamp no. 2 is a seal from a *jar-stopper*, like Plate cxci, fig. 21



FIG. 360.—POTTER'S STAMP WITH HEBREW LETTERS

(viii) **Pottery Groups.**—As such may be named tombs 28 (Plate lxxviii), 31 (Plate lxxvi), 84, 85 (Plates lxxxvii—lxxxix these are early in the style, being just on the border-line between Third and Fourth Semitic), 96 (Plates xc, xci). The pottery from the cistern in II II, illustrated and described in the following section,

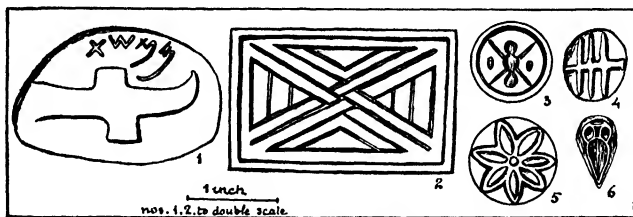


FIG. 361.—POTTERS' STAMPS

is a good group from the transition to the Hellenistic Period. Tomb 142 (Plate ciii) is another excellent group, from about the middle of the Fourth Semitic Period.

#### F.—HELLENISTIC PERIOD

(i) **Foreign Imports.**—A large number of fragments of lekythoi, black and red-figured vases, and vessels with acanthus and other patterns in relief, shews that the potters of this period had good models on which to found their work.





FIG 362—LEKYTHOS

a handsome lekythos of brown ware with ornamentation in glossy black and red; it is unfinished, only the side drawn being decorated. The sherd Pl. clxxxviii, fig 7 is also a fragment of an imported vessel: the decoration is in red on a glossy white slip.

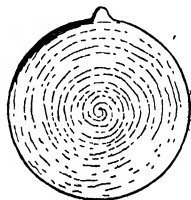
(ii) **Technical Processes.**—The use of the wheel is all but invariable, and the ware is always burnt hard. If a pile of potsherds be struck with a stick it emits a distinct musical "clink," which is not the case with any pottery of the earlier periods. A very few hand-modelled cups, saucers, small jugs, and lamps are to be found, such as Pl. clxxix, figs. 2, 3. These are all of minute size and are probably toys. The eggcup-shaped vessel Pl. clxxix, fig. 4 is also hand-made, as is likewise the feeding-vessel fig. 5, and the fragment of a ring-shaped object fig 6, which is perhaps a trivet for standing pottery upon while baking. Its external diameter is 5". Fig. 363 illustrates another process sometimes used for flat vessels—that of building them up spirally with a "rope" of pottery. This lamp (or spouted saucer) is in very fine ware. It is remarkable for its small spout.

(iii) **Ware.**—The finest and most homogeneous ware is in use in this period. A common ware is a fairly compact clay with little sandy red or white grits, but few flint grits. The colours of the section range from red through black to light olive-green.

(iv) **Shapes.**—The influence of classical models is complete throughout this period.

Pl. clxxvii fairly illustrates the types of vessel imported into the city in this period. Figs. 1–13 shew fragments of bowls with various familiar patterns stamped on them in relief. Fig 14, one of the very few unbroken specimens found, was a saucer decorated with stamped incuse pattern on the inside, and covered all over with glossy black varnish. Figs 16, 18 were also black varnished, with simple patterns in white painted on them: fig 16 had, in addition, vertical flutings. Fig 15 is a fragment of the upper surface of a black-figured bowl, with a dancing satyr painted on it.

Black-figured vessels are represented by the sherds 15, 17, 20, 21, 22, 23, 24. The finer lines in 15, 22, 23 are in sgraffito. Red-figured ware was much less common: figs 15*a*, 19 are the only two good specimens found. A number of fragments of saucers, bowls, lamps, etc., with the familiar black glaze but without ornament (except occasionally stamped palmettes and the like, similar to those in Pl. clxxvii, fig. 14), were found in the surface stratum of the mound. In fig. 362 is shewn a fragment of

FIG. 363—BOWL OR LAMP,  
MADE OF A SPIRAL TWIST  
OF POTTERY

(a) *Jars* have rounded or bluntly pointed bases, vertical sides (generally slightly hollowed under the shoulders and expanding below), and abruptly flattened or oblique shoulders, in the middle of which is a round mouth with slightly turned-up lip. There are two loop-handles just under the shoulder. Fig. 364 is a good example, though the side is perhaps less hollowed below the shoulders and expands more widely above the base than in most. Pl. clxxxv, fig. 5 is another good example: it has a potter's mark scratched on the side. Pl. clxxxvi, fig. 1 is an example with the shoulders more sloping, and the body more vertical, than usual. Note the ribbing of this specimen. Occasionally, but very rarely, there are four handles.

(b) Another form, probably suggested by Rhodian amphorae, has a long tapering base, of rather ogee shape. Pl. clxxx, fig. 1 is a fragment of an example. It is

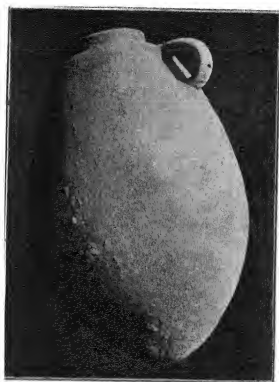


FIG. 364.—HELLENISTIC JAR

decorated with a band in purplish red. This form of jar is not so common as the other.

(c) Pl. clxxx, fig. 2 is a fragment of a quite exceptional vessel. The neck alone has survived; this was so large that the complete vessel must have been of great size. It is adorned with horizontal flutings and has the fragments of the attachments of two loop-handles. It is remarkable to find these *on the neck* of a jar.

(d) Globular jugs, with rounded base, wide expanding body more or less spherical, cylindrical neck, one loop-handle. Pl. clxxxvi, fig. 2, which is decorated with ribbing, is a good example. Pl. clxxxii, fig. 2 seems to be the upper part of such a vessel with a shorter neck than usual.

(e) The cylindrical U-shaped vessel—Fourth Semitic shapes (*f*)—are very common in this period. Pl. clxxviii, fig. 6 is a good example, but it has a base more pointed

than usual. There are no handles. Usually there is a beading or moulding concentric with the mouth on the upper surface of the shoulder.

(f) Cooking-pots have a very distinctive form in this period. They have rounded base, globular body (inclined to be a rather flattened ellipse), short wide neck and rounded continuous mouth. There are two small loop-handles, usually slightly moulded on the outer surface, and always long and narrow in section. The ware is always hard and brittle. The body of the vessel is almost always ribbed with horizontal flutings, though not invariably so. There is usually a stain of smoke-blackening on the bottom. Pl. clxxx, figs. 6, 8 are typical examples, one with ribbing, the other without.

(g) Small jugs and vases are very common in this period, and representative specimens are figured on Pl. clxxxi. There is a considerable variety of form, and they are not easy to classify, though they are always easily recognisable. Globular vessels, probably ultimately derived from the small Cypriote jugs imported at the



FIG. 365.—CONICAL JUG, HELLENISTIC PERIOD

beginning of the previous period, are illustrated in figs. 1, 6, and 11. The first of these most closely approximate to the Cypriote original, with its disc-base, cylindrical neck, and moulded lip. The handle is modelled separately: when (as often) it breaks off, the moulding is seen to run behind the upper attachment. Pl. clxxx, figs. 3, 11 are of the same family, though these have *two* handles. In Pl. clxxxi, fig. 6 there is a wavy disc-base, and the neck is shorter and becomes conical, as also does Pl. clxxix, fig. 12. In the graceful vessel Pl. clxxxi, fig. 11 the awkward angles are eased off. Compare Pl. clxxix, fig. 14. Pl. clxxx, fig. 10 probably belonged to the same type, though the neck was so much longer and narrower. Pl. clxxxi, fig. 14 may be reckoned with these: here the body of the vessel is continued downward as an inverted cone. Another inverted conical vessel is shewn in the photograph fig. 365. It is remarkable for the unusual position of the handle, with both attachments on the shoulder. Of much the same character as these vessels is Pl. clxxxi, fig. 3, with sharp shoulders and concave neck: this, however, has a channelled mouth. The short-necked vessel with prominent and



abruptly angled handle, Pl. clxxviii, fig. 1, may also be mentioned here. It is in a gritty ware of olive-green colour.

The handsome little jug with two handles and a spout (broken off) shewn in Pl. clxxix, fig. 15 may be noticed here. It is ornamented with black lines, and at the top there is an interesting survival of the Third Semitic concentric semicircle motive with a red centre. Neckless globular vessels, as Pl. clxxxi, fig. 2, are very frequent. This is a good typical specimen, but perhaps it is more common to find the base rounded, and even the little turned-up rim absent. An oval form with ribbing is seen in Pl. clxxix, fig. 19.

Conical vessels, of which Pl. clxxxi, figs. 4, 13 are typical specimens, are very common. These have a disc- or ring-base, body prolonged upward as a cone, ending in a continuous mouth with spreading lip. There is one handle, which is either inverted triangular or heart-shaped. There are a number of varieties and derivatives. Fig. 16 (to which 6*a* is essentially similar) has a rounded base, neck, and no handle: the conical body, however, persists. To fig. 5 [VI 20]—a rare form—the ogee base gives a peculiar character of its own.

(*h*) Long narrow vases are of two kinds—handled and handle-less. In the former, of which Pl. clxxxi, figs. 8, 12 are good examples, the body is a long inverted cone, with abrupt shoulders leading to a concave or cylindrical neck which is also fairly long. There are always two loop-handles.\* The latter, of which figs. 9, 10 represent extreme types, have a long body, elliptical in vertical section, shading gradually into a long neck at one end and a long solid base at the other—too narrow to support the vessel in equilibrium. In fig. 9 the transition from neck to body is abrupt, and the base is short; but it is evidently of the same type as fig. 10. These were probably ointment vessels. Pl. clxxix, fig. 21, which is adorned with red painted lines, is not unlike a "telescoped" vase of this kind.

(*i*) The barrel-shaped vessel Pl. clxxx, fig. 14 is remarkable for its prominent loop-handle, in shape almost a complete circle. Fig. 4 in the same Plate is analogous, though of a more ordinary form, as is the round-bottomed Pl. clxxxii, fig. 4.

(*j*) Pl. clxxx, fig. 7 is of the conical type, and is painted black down to the lower attachment of the handle. A quadrant round from the handle is a spout. Little spouted jugs such as this are not at all uncommon in Hellenistic *débris* both here and in other mounds, and to a greater or less extent they all share the peculiarities of spouted vessels that have already been stated (*ante*, p. 182). The bore of the spout is so narrow that only a thin trickle of fluid can pass through, and it is so low down in the body of the vessel that it can never have been more than half full.

(*k*) Jugs with ring-base, a body inclined to be lozenge-shaped in vertical section, but working off at the top into a wide cylindrical neck, one loop-handle. This kind of vessel, of which Pl. clxxx, fig. 5 illustrates the type, is always of superior ware and covered with a whitish yellow slip.

(*l*) Jugs resembling shape (*k*), but having an oval body, and two loop-handles. There is usually an effective frilling round the margin, composed of a narrow ledge of

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\* The upper attachment of these can either join the vessel horizontally, as in the example figured, or bending downward and inward so that the two together have a V-like appearance.

pottery waved up and down. Pl. clxxxii fig. 3 shews an example of this kind of vessel: fig. 11 on the same Plate more clearly illustrates the frilling.

(*m*) The ordinary one-handed jugs persist, with blunt if not flattened bases. In this period ribbing first appears on jugs of this kind: an example will be found



FIG. 366.—FRAGMENT OF A LENTOID VESSEL

in Pl. clxxix, fig. 16, which well illustrates the form these vessels assume in the Hellenistic Period.

(*n*) The small jug Pl. clxxix, fig. 18 is a freak; the potter has put an alternation of vertical and transverse ear-handles upon it.

(*o*) In Pl. clxxviii, fig. 12 is the upper part of a vessel with a massive flat

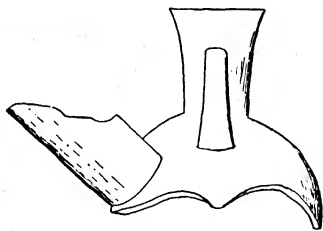


FIG. 367.—SPOUT WITH LONG CHANNEL

collar round the mouth, to which are attached three loop-handles. It is not common to find *three* handles in vessels of this period.

(*p*) Lentoid vessels are rare, and when found are generally of an ornamental form. Such are Pl. clxxxiv, fig. 11, which shews a fragment of a lentoid vessel with a row of scallops decorating the edge. The photograph fig. 366 shews another fragment: this vessel had two transverse ear-handles on the edge, the attachments of which were developed into ridges, partly reeded, running round the vessel. The sides were ornamented with concentric ribbing.

(g) Globular vessels with ring-base, one loop-handle, and a channelled strainer-spout a quadrant round from it. This is a survival of the tradition of such vessels as Pl. clviii, fig. 15. The channel of the spout is often, as the drawing fig. 367 indicates, of extravagant length.

(r) Pl. clxxx, fig. 12 gives a characteristic type of Hellenistic bowl. There is a ring-base, a widely expanding body, and a lip moulded *internally*. The ware is generally covered with a red slip. Different shapes of bowls and saucers are shown in Pl. clxxix, figs. 22 (a handsome specimen), 23, 25, 26.

(s) The cyma-shaped bowl is rarer in this period than in the Pre-Exilic Period. Pl. clxxix, fig. 13 is a bizarre specimen, with rounded base.

(t) The commonest form of saucer is that represented on Pl. clxxx, fig. 15. This has a narrow flat base and ogee body with rim curving inwards. The larger specimens are usually decorated with a splash of brownish-grey paint irregularly daubed on to the edge: the smaller examples have almost always a faint ribbing.

(u) A superior kind of saucer often found, in imported red-slip ware resembling Samian, from which it is locally imitated, is shewn in Pl. clxxxi, fig. 7. Here there is a ring-base, widely expanding body of inverted conical shape, and a lip turned downwards. There are several varieties of this form of saucer: a very common form has a high ring-base. The ornamental handles which they sometimes shew are represented in *EP*, Pl. 61, fig. 28.

(v) A flat saucer with rounded sides is shewn in Pl. clxxix, fig. 10.

(w) V-shaped bowls with pointed or narrow flat bases. A few vessels of this shape were found: they are not common. They have the peculiarity of being plain outside, and moulded on the inside of the mouth. Pl. clxxix, fig. 17 is a good example: fig. 27 on the same Plate is a fragment of a similar vessel, shewing a more elaborate moulding.

(x) Pl. clxxxii, fig. 1 is probably not a saucer, but a jar-cover. It is in compact green ware with a burnished red slip on the outside.

(y) In Pl. clxxxix, fig. 9 is shewn a large flat tray 1' 4½" in diameter, with the edge turned up obliquely. This resembles the baking-trays previously described, but is without the perforations in the base. The type is not very common.

(z) Small kohl-pots, like those found in the previous period, but better made, are very common. Such is the moulded specimen Pl. clxxix, fig. 11.

(a¹) Saucers, always of compact homogeneous yellow ware, with massive ring-base, sides expanding upwards like a V, heavily moulded on the outer surface. Pls. clxxxvi, fig. 3, clxxxvii, fig. 13 are good typical examples.

(b¹) Mortaria of the ordinary Roman form, with channelled spouts, are sometimes found in this stratum, but they are not very common, and I suspect are not of local manufacture. The ware seems as a rule to be more compact in texture than the local vessels, reminding one rather of the ware of Rhodian wine-jars. The spout of such a vessel with a waved moulding upon it is shewn in Pl. clxxix, fig. 7. The edges of these mortaria are often decorated with indentations divided into groups (not encircling the whole vessel). This is shewn by the fragment illustrated Pl. clxxxix, fig. 8. Compare Pl. clxxxii, fig. 15.

(c¹) The upper part of a standing tube, such as has already been described under

previous periods, is shewn in Pl clxxviii, fig. 11. It had evidently four rectangular perforations in the sides. The mouth was ribbed

(d<sup>1</sup>) *Lamps*.—The open lamp, such as we have seen to be in one form or other the only type of the earlier period, persists down to about the end of the Persian Period. Fig 355 illustrates the evolution in shape of spout, beginning with the small triangular projection in the Second Semitic Period and advancing by a regular series to the exaggerated form shewn by the fifth of the group. From this it is but a step to a closing of the spout by making the flanges meet, as in fig 368, no. 1, or by overlapping them, as in fig. 368, no 2

The two wings of the spout, having thus overlapped, next fuse into a tube, and we have the form represented in Plate clxxxiii. By closing over the reservoir, leaving only a hole in the middle, the potters not only obtained the advantage of avoiding waste by evaporation, but they made a surface apt to receive decoration of which they freely availed themselves. Plate clxxxiii is a representative collection from the mound itself ;

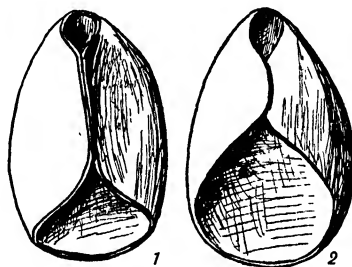


FIG. 368—LAMPS, HELLENISTIC PERIOD

others are drawn in the plates of Tomb Deposits. The decoration will be seen to consist of radiating lines, mouldings, or triangles, sometimes in groups, sometimes covering the whole surface. The spout is either plain or has a simple pattern on it as figs 11, 15 ; in fig 17 is an anthemion, in fig 22 a caduceus. Perfectly plain lamps are not uncommon, as figs 2-6 ; the *deep* lamp, of which fig 5 is a good example, is always plain. A kind of finger purchase appears at the right-hand side of the vessel, sometimes as a raised handle, as in fig. 3, but more often as a projection, as figs. 10, 11. It is not clear that this was ever of much use in giving a hold on the lamp : in any case it very soon became rudimentary, though it is remarkable how it persists, usually as an S-like spiral, interrupting the symmetry of the pattern, as in fig. 17. To find it on the other side, as in fig. 12, is very rare. In Pl clxxxiv, fig. 12 it is curiously developed into a human figure. The butt-end of the lamp is not usually ornamentally treated, though it is sometimes prolonged into a sort of bunch or tail, as in fig. 21 : fig. 9 seems to be an ornamental example of some such feature broken from a large lamp. The decoration with two genii, as fig. 22, is not very common at Gezer.



(e<sup>1</sup>) Multiple lamps, though not so common as in the Byzantine tomb deposits, appear in the Hellenistic stratum. Fig. 369 is a good example; it has two perfect lamps and part of a third, with a common reservoir. Two or three fragments were found of lamps with a vertical tube running through the reservoir, apparently for

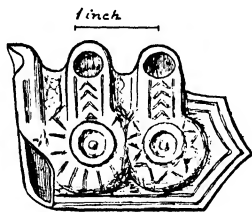


FIG. 369.—MULTIPLE LAMP, HELLENISTIC PERIOD

mounting in a spiked candelabra. Compare *EP*, Pl. 62, fig. 15; the Gezer specimens were exactly similar to this.

(f<sup>1</sup>) *Strainers*, as fig. 370, about 4" high, on three short feet: bowl with a rounded base, cylindrical body moulded lip, and one loop-handle: in the sides three or four rows of perforations. This is a moderately frequent type of vessel in the Hellenistic stratum. It is noteworthy that the perforations are only in the sides, never in the base. Fig. 371 is a simpler straining-bowl, without the feet. Another form of strainer is shewn in Pl. clxxviii, fig. 18. It was evidently to be used exactly like the strainers sometimes held under the spouts of teapots to check the tea-leaves.

(g<sup>1</sup>) Double vessels are but rarely found in this stratum. The small example



FIGS. 370, 371.—STRAINERS

fig. 372 is the best that came to light. It is peculiar in having a handle looping over the bar joining the two saucers. There is no internal connexion between these vessels.

(v) **Details.**—Ring-bases are almost universally used, disc-bases being occasionally found. Pl. clxxxii, fig. 10 shews the section of an unusually large ring-base ornamented with coarse mouldings.

Loop-handles are generally of the horizontal ellipse shape; a few are of the long inverse triangular shape; a flat oval in section, with simple wave mouldings on the outer surface. Sometimes a bifurcation or two knobs are found on the lower attachment of the handles as in fig. 358. At the upper attachment of large handles there is often a shield-shaped disc with two depressions on it. See Pl. clxxxii, fig. 9.

A vessel with transverse ear-handles is shewn in Pl. clxxxix, fig. 30. These are not very common in this period.

Ornamental handles are not very common, and when found are not very successful.



FIG. 372.—DOUBLE VESSEL

In Pl. clxxxii, fig. 13 an awkward attempt has been made to produce a handle of two interlacing loops. A common form of handle is shewn in Pl. clxxxix, fig. 20, which often spoils the appearance even of otherwise well-made vessels: being a carelessly made twist of pottery stuck on crookedly, so that the two attachments are not in a vertical line.

Handles are not infrequently made with a more neatly executed twist, as on Pl. clxxviii, fig. 3. There may also, in large vessels, be a twist between two plain strands, as in Pl. clxxviii, fig. 4. In the great Central Reservoir was found a straight tube of pottery,  $1\frac{3}{8}$ " diameter and 3" long (but broken at both ends), with a screw imitating nine strands running up its outer surface.

Straining-screens are sometimes made in the mouths of jugs. Pl. clxxxiv, fig. 13 is a curious instance, with a large hole for pouring liquids in, and smaller holes for pouring them out. It is not obvious how the ingenious inventor of this germ-trap imagined the inside of the vessel could ever be cleaned. Compare the spout Pl. clxxviii, fig. 9, which likewise shews one large hole and a number of small ones. Pl. clxxxiv, fig. 14 shews another example, but without the tube for filling.

Jar-stoppers resemble those from the previous period. Pl. exci, figs. 10, 11, 14, shew different forms of the oval stopper which is so difficult to understand. It will

be noticed that two holes or grooves are an essential part of this object in the Hellenistic Period. this is not the case in the earlier periods, as fig. 12, which is from IV 30, shews. The stopper fig. 13 is of limestone: it has a groove across the top for the string. Fig. 15 is another of the perforated oval discs from this period, with rudely scratched ornament. Fig 16 is of bone, picked up on the surface of the mound: an oval slot runs vertically through it. Fig 17 is also of limestone: one of many similar fragments found in the rich cistern in II 11. Fig. 19 has some marks of ownership scratched on its top, which, however, mean nothing to us.

(vi) **Ornament.**—(a) *Combed*, not very common. In Pl. clxxviii, fig. 17 there is horizontal combing shewn, which stops at the place where the handle has been, having been made after the handle was fastened on. On the contrary the deep groove under the lip was made before, as the handle attachment *bridges* but does not stop it.

(b) *Burnished*, rare. The fret on the sherd Pl. clxxxii, fig. 7 is composed of burnished lines

(c) *Moulded* ornament, in the Hellenistic period, consists usually of a roll with nicks upon it to imitate a rope, as in Pl. clxxviii, fig. 16. In Pl. clxxx, fig. 13 is herringbone moulding of a similar kind. Some other forms also are revived during this period: for instance, the effective form which consists of a raised band with a row of circular indentations like finger-prints upon it. Another moulded ornament which comes into use in this period is a double frilling round the edges of vessels, as Pl. clxxxii, fig. 3, 11. A fillet running down the back of a jar-handle and ending in a coil is illustrated Pl. clxxix, fig. 24. In flat saucers, raised ribs or ridges sometimes radiate from the centre of the base; this develops into such a form as Pl. clxxxix, fig. 28. Rows of knobs also frequently ornament the surfaces of vessels: sometimes there are two or three such knobs as a crown to the upper attachment of handles. See for such decoration the neck and handle of a jug (the mouth about 4" diameter) shewn in Pl. clxxviii, fig. 8. A handle made of an animal's head (Pl. clxxx, fig. 9) was found in VI 30. Such a detail as this is quite unusual in the Hellenistic Period. A few examples were found both in this and in the preceding period of the moulding of a rude human face on the neck or side of vessels—like the greybeards or bellarmine of the Middle Ages. These were evidently imitations of the vases in form of the female divinity, described in Chapter X.

The ornamental reeding on the upper attachment of a jar-handle, Pl. clxxviii, fig. 5, is unusual. In fig. 15 on the same Plate a jar-handle is ornamented with two strips of pottery crossed over it, decorated with impressed dots. There are two finger-prints on the upper attachment.

(d) *Incised*.—Jars are sometimes ornamented with single indentations, square in section, running horizontally round the body, like those in Pl. clxxxvi, fig. 1.

An effective kind of fluting is sometimes found on superior bowls with bright-red slip. This bears a certain resemblance to the "linen-pattern" carving on Tudor woodwork; Pl. clxxxii, fig. 5 is an example. Similar is the fragment Pl. clxxvii, fig. 2. This, like all the vessels shewing this ornamentation, is covered with a warm red slip resembling that of Samian ware. Another very characteristic form of moulding is formed by pressing *down* on the surface of the pottery a row of spaces with the

point of a triangular instrument Pl. clxxxii, fig 6, is a good example. Another, combined with impressed circles, is shewn in Pl. clxxxix, fig. 29. Rows of indentations, as in Pl. clxxxvii, fig 7, and a *semée* of dots as in fig. 12, come under the same heading. Pl. clxxxix, fig. 1 represents a sherd of a large bowl with an ornamental device, unhappily too incomplete to identify, scratched upon it.

A very unusual device is shewn in Pl. clxxviii, fig 14. Here there are deep grooves, rectangular in section, made in the sherd, which were filled with small square discs of pottery, after the fashion of the tesserae of a mosaic. I did not come across any other example of this form of ornament.

(e) *Painted*—Painted ornament is rare and as a rule not inspired. Pl. clxxviii, fig 10 is a curious revival of a very ancient form of ornament; this is the base of a handle, in black ware, with two circles punched in it and filled with a white composition. Some few vessels recall to a remarkable degree the old Aegean patterns; possibly actual ancient specimens were found and imitated. The most remarkable example found was Pl. clxxxiv, fig 1, which was found in a Hellenistic cistern at the N. end of trench 30, smashed into many pieces. The ware is hard and compact, of a Venetian red colour. There is a ring-base, an inverted conical body, two handles, and a slightly but effectively moulded mouth. The decoration is applied to a yellow slip with a slightly reddish tinge, and consists of two broad bands encircling the body horizontally, and vertical stripes on the outer surface of the handles and on the neck, flanking the plane of the handle. The mouth also is painted the same colour (a warm glossy red which at first sight strangely recalls the iron-glazed reds of the Aegean potter). On the shoulders are two narrow rings running round the vessel, just under the lower attachment of the handles, and above them two looping lines of red, confined between the stripes flanking the handles. Between them is a similar looping line of white, and the loops are filled up by two rows of drop-shaped marks in white and red respectively.

Figs. 2, 5, 7 on the same Plate are analogous, though 2 and 7 are vessels with only one handle. The ornament on these is similar, though carried out very differently in the two. In both it consists of rings with dots between; but in the one it is very bold, in the other drawn with fine and, so to speak, timid touches. Fig. 5 with its U-shaped pendant on the neck and its double ring of spirals, is an extraordinary instance of Aegean reminiscence. We can hardly doubt that the potter of this vessel had a Mycenaean vase before him which served as his model. An effective but unfortunately very imperfect decoration, founded likewise on spirals, is shewn by the fragment fig. 10.

Fig. 8 is interesting, being derived from the scrolls of foliage on black-figured vases: it is quite possible that the fragment fig. 6 was the actual model followed by the potter of this example.

The sherd Pl. clxxviii, fig. 13, painted in black lines on a buff ground, has a geometrical device that seems intermediate in "feeling" between that of the Third Semitic and that of the Arab Period.

Many vessels, however, are decorated with a mere splash of colour daubed irregularly on, especially at the rim. Pl. clxxxiv, fig. 4 is an example of this treatment.

A fragment of a large flat saucer was found in VI 29 in Venetian red ware, painted a dark brownish-red colour. A broad meandering line in white ran irregularly across the fragment with drop-shaped dots of the same colour attached to its outer edge. Large spots or "blobs" of colour are sometimes dotted irregularly over the surface of pottery of this period. As a rule these dots are white.

It is a great pity that the elaborate pattern of spirals in black and red Pl. clxxxiv, fig. 10 is so fragmentary. It is not possible to be certain how it was completed.

(f) *Sgraffito* is for the first time introduced as a method of ornamentation. It consists in covering the vessel with colour, and then scratching ornamental devices upon it in which the surface of the clay shews up underneath. A good example is shewn in Pl. clxxxiv, fig. 3. Unfortunately only the neck and handles of this vessel remain, and the mouth also is completely broken away. It is in yellow ware and is covered all over with red, on which are painted a white line, just above the upper attachment of the handles, three sides of a black panel on the side of the neck, and inside this a row of yellow dots. Above these dots are zigzags scratched through the red: the three horizontal lines underneath the black panels and the row of worm-like curved lines between the lower two are scratched in the same way. Fig. 9 is another example. In this there are a number of white dots on the grey slip with rather irregular scratched lines joining them. Below are some vertical flutings carelessly executed. Another example is Pl. clxxxii, fig. 14. Here the whole design is in *sgraffito*.

(g) *Pattern Stamping and Punching* is more used in this period than in any other. In Pl. clxxxii, fig. 8 will be seen the handle of a large vessel ornamented with punch-marks. Rows of impressed dots or circlets, vertical and horizontal, sometimes combined in various ways with incised lines, zigzags, etc., are not infrequent in this style. The ornamentation of the middle of the upper surface of black-slip Athenian ware—a circle of punched dots, with or without a palmette stamped at the quadrant—is frequently imitated in vessels of superior ware.

A jar of shape (α) was found with a horizontal row of dots running round just under the shoulder, interrupted and running vertically downwards on the surface of the vessel beside each handle.

(vii) **Potters' Marks.**—Fig. 373 contains the principal scratched marks found on Hellenistic pottery: there was no room for these on Plate cxc. Nos 1, 2 were found on the sides of vessels between the attachments of the handles, not on the handles themselves. The first of these may be a monogram of ΑΕ: the sherd belonged to a Greek amphora, with upward-curved loop-handles. The second is evidently ΔΙ. Another amphora had the letter Α impressed on its handle. In VI 12 was found a fragment of a jar bearing the lower attachment of a handle, with underneath in red paint the letters . . . [ΠΟΜΟΥ, probably the end of the potter's name. One jar-handle was found with a row of seven finger-marks running down the back. On Plate cc are collected together all the *seals* found on pottery of this period (exclusive of those on Rhodian and other foreign handles, which properly belong to a later section) which could be deciphered (figs. 32–36, 38–51). There were several copies found of the reversed F and the six dots (figs. 38, 46). The two from gems, one

of which represents a man killing an antelope and the other a lion devouring an animal, are noteworthy (figs. 32, 33). The handle with a cross of four L's (fig. 35) was not found on the mound itself, but picked up in one of the neighbouring fields.

The stamps bearing inscriptions are, however, naturally more interesting. Some stamps with Hebrew inscriptions are written in characters of such late forms that they must be assigned to this period. Such is the stamp from a fragment of a saucer (which is in itself uncommon—they are usually found on jar-handles only) with a worn and imperfect inscription, shewn in fig. 374. It seems to read בנר [?] קרין [?]. There is a single stroke between the two lines of writing. No names similar to these are found in the Hebrew Scriptures.

The stamp fig. 375 was found in a late rubbish-heap cast of the great Central

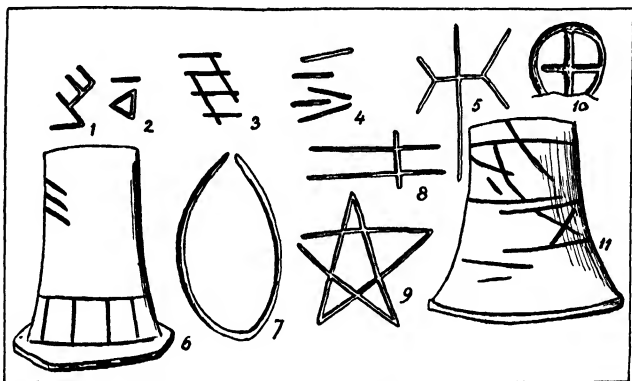


FIG. 373.—POTTERS' MARKS, HELLENISTIC PERIOD

Reservoir. It gives a unique form of the rare letter ד and bears the not very intelligible inscription רמ.

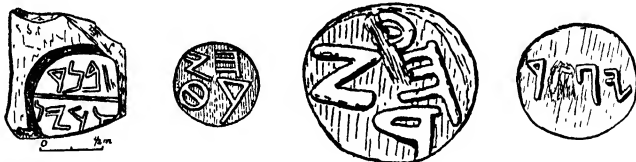
Not far off another seal with the same letters on a jar-handle of similar type came to light. This reads רמ. The top of the seal is injured by a smudge. The letter ר is of a peculiar Z form, with only one upper horizontal bar (fig. 376). It is certainly *not* incomplete.

In a third seal was found a similar combination of letters, רפ\*, presumably a potter's name (fig. 377).

(viii) **Pottery Groups.**—One of the most important groups found was at the mouth of the cistern in IV 11. Lower down in this great pit, another valuable series of antiquities of earlier date was discovered. but these were quite independent of the

vessels and fragments in the mouth of the cistern. This had evidently been used as an ashpit : consequently most of the vessels found were broken. The majority were in a brittle yellow ware with sparse sandy grits : there was also a warm red ware represented with limestone and a few specks of flint. The colour was uniformly a light sandstone yellow. Very likely they were all from one pottery. The principal objects found are represented on Plates clxxxv-clxxxvii.

Plate clxxxv shews a globular vessel on ring-base, which has lost its handle and neck (fig 1), two small rudely hand-modelled jugs (figs. 2, 3), a stand for a round-bottomed pottery vessel (fig 4), and the large jar with potter's mark, shape (a), which has already been alluded to (fig 5). Three small jugs of different varieties (figs. 6, 7, 9), and a broad shallow bowl (fig 8) with marks of cooking underneath complete the pottery on this Plate. Fig 13 is of bone, fig 14 a ferule of bronze, fig. 15 a fragment of an iron bracelet, fig. 16 one of two armlets, also in iron. Figs. 10 and 11 are a ring and a pin in bronze, and fig 12 a bead in blue glass.



FIGS 374-377—POTTERS' STAMPS WITH HEBREW LETTERS

On Plate clxxxvi are two large jars that have been already mentioned (figs 1, 2), a V-shaped saucer, moulded heavily outside (fig. 3), a small jug (fig. 4), and the side of a lentoid vessel with decoration in black and red (fig 8). Fig. 5 is a flat stone dish on three feet, figs 6, 7 two weaver's weights, and fig 9 an ivory inlaying slip.

Plate clxxxvii bears a series of small jugs (figs 1-8). Note especially the heavy mouldings with narrow mouth, very characteristic of this period, shewn in figs. 4, 5, 6, 8. In the saucer, fig. 9, note the hollowing of the base : on the other hand the thickening of the foot of fig. 10 should also be noticed. Fig. 11 has a remarkably moulded neck. Fig 12 is a characteristic lamp, with broad brim : fig 13 another of the heavily moulded V-shaped saucers. Fig 14 is a fragment of a stone cover of a jar, of which several were found. Another is shewn in Pl cxci, fig. 17. Fig 15 is a cyma-shaped bowl. Fig 21 is a lamp in black ware. An "Astarte plaque," the lower half painted red (fig. 22), is the only specially interesting piece among the other objects, which comprise a pottery spindle-whorl (fig 16), a bronze earring (fig 17), a bronze ring (fig. 18), a small stone cup (fig. 19), weaver's weight (fig. 23), bronze shield from some wooden or leather object (fig. 24), bronze arrowhead (fig. 25), and a disintegrated fragment of glass (fig. 20).

The collection seems to be early in the period. The ממש jar-handle and the other Hebrew stamp, specially noticed above, also came from here. Probably we would not be far wrong in assigning all the hoard to the Persian Period.

Unfortunately there is no good group for the later ware of the Hellenistic Period: tomb 103 (Plate xcvi) is the best, but it is not satisfactory.

#### G.—ROMAN AND BYZANTINE PERIODS

At Gezer the pottery of these periods is confined to tombs and to stray fragments found in the minor ruins and the valleys in the neighbourhood. Scarcely a scrap of pottery later than the Hellenistic Period was to be found on the *tell* itself. We may take the two periods together: there is little that need be said of them, as with the exception of lamps very few sound or nearly sound vessels were forthcoming.

The ware of the vessels (not the lamps) is very fine, and as a rule burnt hard and brittle, so that it breaks like a biscuit. The colour is a dark reddish brown: it is usually full of minute limestone grits. The leading characteristic, however, is

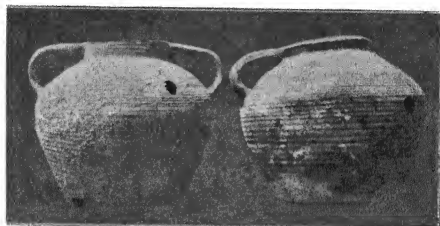


FIG. 378.—ROMAN POTS

the hard mechanical horizontal *ribbing*, which is an all but invariable characteristic. No other ornament was noticed in any example: coloured decoration was never found.

Large jars and cooking-pots with flat or convex bases were the principal forms discovered. See Vol. I, figs. 188, 195; also fig. 378, which shews two pots that were found in the fruit-press *Hawaḡir a*. Vessels, as a rule, are round-bottomed; even when the base seems meant to be flat there is perceptible convexity. The bottom, as well as the sides, is decorated with ribbing, always in concentric circles round the middle point.

Lamps, on the other hand, are made of a flaky and usually very homogeneous ware. They are as a rule so very soft-baked that the pattern can be scratched, and may sometimes be almost effaced, if they are washed with a stiff brush in water. They are always made in two halves, a lower and an upper: these are often badly secured, and have a tendency to come apart. The ware used for lamps is of an ochreous yellow colour, but is often covered with red paint.

The peculiar form of Roman lamp, with a narrow hole opening into the reservoir, at the bottom of an ornamental depression in the upper half—though very common in Egypt and not unknown in Palestine—was never found in Gezer. The type, however (without the ornament), was imitated by the Arab potters. The Byzantine



lamps are essentially similar to the Hellenistic, save that the angle between the spout and the reservoir is filled up, the lamp thus assuming the shape of a triangle with rounded base. This is the commonest form: in the latest specimens—approximating to the Arab Period—the wick end of the lamp is broadened, so that the lamp tends to an oval shape. There is a second variety, in which the reservoir is carried upwards in a conical form and ornamented with horizontal ribbing, but not otherwise. There may or may not be a loop-handle at the butt-end of this type of lamp, for which the name of “boot-shaped” lamp may be suggested (see Pl. lxxii, fig. 11, etc.).

There is a large variety of forms of ornament stamped on the upper surface of the ordinary type of Byzantine lamp. By turning over the Plates of Tomb Deposits the reader can see this for himself. They are generally geometrical (radiating lines, zigzags, series of dots and circlets) surrounding the reservoir-hole. A guilloche, rosette, palm-branch, or cross generally decorates the spout. More elaborate designs are sometimes to be seen, as the pot of flowers on a lamp with four wick-holes (Pl. lxxvii, fig. 19, with which compare Pl. ci a, fig. 15); there are one or two other lamps on the former Plate worth notice, especially fig. 15, with two radiating spouts. The fine lamps from tomb 99 on Plates xcii, xciii are specially interesting: particularly fig. 3 in the latter Plate, which is one of the few specimens of which the lower half was decorated as well as the upper. It is rather broader and shorter than usual.

The commonest form of lamp is that to which, on account of the motive of its chief ornament, I give the name of the “candlestick” lamp: the varieties of this lamp are shewn in Plate clxxxviii, to which reference is made throughout this paragraph. The space round the mouth of the reservoir is decorated with oblique lines, which are probably the degeneration of a floral pattern such as that on Pl. lxix, fig. 1. On the spout is a representation of the seven-branched candlestick (fig. 1). This passes through various phases of evolution: the stem projects upwards and downwards (fig. 5), the base is suppressed (figs. 2, 6), extraneous ornaments are added (as the pellets in fig. 7); the connexion with the candlestick is forgotten and the device mistaken for a palm-branch, with the consequence that the sloping lines representing the arms of the candlestick are increased (fig. 3) or diminished (fig. 8) in number; finally even the palm-branch is forgotten, and the design becomes a mere geometrical pattern, capable of reversal (fig. 4).

There is also a great variety of treatment in the butt. The forms found at Gezer are also shewn on Plate clxxxviii and indicated by letters. In the enumeration of types of lamps discovered in the tombs (see, for example, Vol. I, p. 375, tomb 193) the varieties are indicated by combinations of the appropriate letter and figure. When there is no letter the butt is blank, without an ornamental pattern.

In some lamps, otherwise similar to these, there is an eight-pointed star instead of the candlestick.

Some lamps bear inscriptions. It is curious that no examples of the inscription  $\Lambda\Upsilon\chi\text{N}\Lambda\text{P}\text{I}\text{A KAA}$ , common on lamps found at Jerusalem, came to light at Gezer. The “lamp of Stephanos Philochristos” (Vol. I, p. 366) was by far the most interesting. The makers’ names, in Roman letters, on lamps from tombs 124, 128 have already been noticed. In another lamp from one of the tombs—I think from 126, but cannot find the note—was the inscription  $\overline{\text{KC}} \cdot \overline{\text{O}}\text{WTICMOC MOY}$ . Of special

interest from the point of view of artistic evolution was the inscription, several times found,  $\Phi\Omega\text{C}\ \chi\Upsilon\ \Phi\text{E}\text{N}\ \Pi\text{A}\text{C}\text{I}\text{N}$ . The subjoined table (fig. 379) of the varieties which this inscription assumed through copying by a succession of illiterate potters is suggestive and well worthy of careful study. It will be seen how the copyists strive for symmetry as soon as the original sense of the legend is lost, and how to this craving are due the transpositions and modifications which the letters suffer.

No. 1 of this series represents the way in which we may suppose the inscription to have been originally written, nos 2-5 shew the way in which it is actually found at Gezer. I have intentionally put them into a diagram form, and omitted the interjected  $\text{KOY}$  ( $\kappa\upsilon\rho\acute{\iota}\omicron\nu$ ) in no. 2, to facilitate comparison. Facsimiles will be found in Pls civ, fig 3, cx, figs 2, 10 (fig. 3 may also be compared); cxviii, figs 15, 16. It is not suggested that this is the order of the evolution that is obviously not the case, nor could the development be traced step by step unless we had every lamp of the

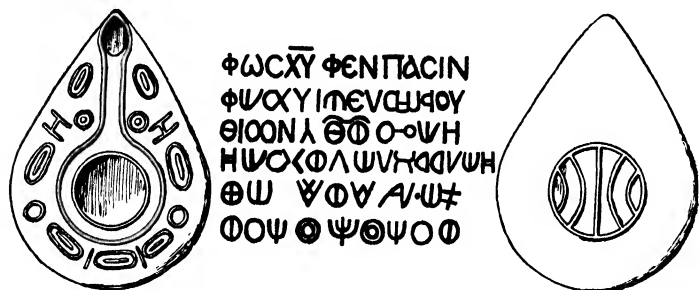


FIG. 379.—DIAGRAM SHOWING THE DEGENERATION OF LETTERS INTO ORNAMENT

series, from other places as well as from Gezer, before us. The lamp drawn top and bottom at the ends of the writing was found not at Gezer, but on the lands of the neighbouring village of el-Kubáb. The H-like figures seem to shew that it presents us with the legend in the last stage of degeneration: the base is of an unusual design. Other purely ornamental patterns on some of the lamps illustrated in this work may quite possibly be likewise genealogical descendants of this motto.

The fragments shewn in fig. 380 were found in a late Byzantine tomb at the east end of the mound. It was impossible to fit them together. They present a large and interesting series of stamped ornaments, among which lions' heads will be seen.

#### H.—ARAB PERIOD

To complete the record of Palestinian pottery, so far as the excavation of Gezer threw any light upon it, a few words on the *Arab Period* will be necessary. There are in the neighbourhood a number of early Arab villages in ruins, and I occasionally

obtained representative sherds from them: but the principal source of supply was the tomb no. 170, in which an early Arab family had evidently established itself, and left behind various traces of its occupation. The chief sherds found, with a few other objects, are illustrated on Plate clxxxix.

The ware used is generally a compact and rather "fat" clay, moderately soft-baked. There is a rich cream-like slip, ranging in colour from a dirty buff to dark brown, and sometimes of a rather crude chrome yellow. On this the design—always a geometrical pattern\* of considerable complexity though simple in motive—is painted in a dark-brown colour. Many of the superior vessels are covered with a glaze, brown, green, or yellow, on which the ornament is drawn in brown lines.

Very few whole vessels, or even sherds sufficiently large for restoration, were found, so that less can be said about the shapes than might have been hoped. But there seem to have been large globular jars, not unlike the Pre-Semitic and First Semitic barrel-shaped jars, and, strange to say, like them having ledge-handles, though of a different shape from the early ledge-handles. Pl. clxxxix, fig. 5, with the accompanying section, will shew one type. Another resembles half of a conical bowl, adhering (concavity upwards) to the side of the vessel. This kind of handle is still made in native pottery. There are also globular jugs with cylindrical necks on ring-bases, with one handle. The telescope-like neck of fig. 24 is very characteristic, as is also the stamp with a fret of lines, which is extremely common. Saucers are also found, which may be perfectly flat, like the fragment fig. 4, or of the rounded shape fig. 11.

The last, however, is not a saucer, but a jar-cover, and is another extraordinary recrudescence of the earliest type of ware: the similarity in style to the Second Semitic jar-covers, with two loops in the middle of the saucer, will strike the reader at once. Lamps are either of the Hellenistic type, with long spout, or the Byzantine slipper form: a specimen of each is shewn on the Plate, figs. 1, 2. The first has a flat base, and the top is rather flatter than the Hellenistic forms. The second has some very obscure ornament in low relief upon it: the pottery was very soft

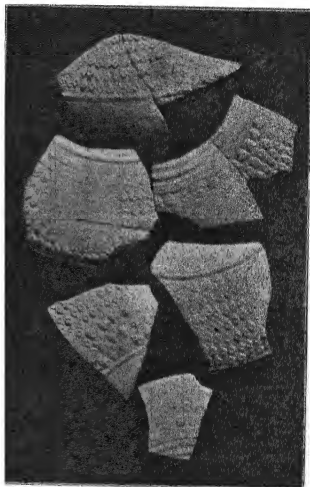


FIG. 380. POT-SHERDS WITH STAMPED ORNAMENT

\* A very rude human face on an Arab sherd from Tell es-Şâfi, is shewn in *EP*, Pl. 65, fig. 7. This, however, is possibly a relic of the Crusaders, who had an important occupation on this mound: it violates the Muslim *tabu* on representations of human figures.‡

and it has become worn off. But the common Third Semitic lamp, which in the Hellenistic Period disappears almost completely, comes once more into use, and is still very frequent among the Arab inhabitants. Small jugs like fig. 23 are not uncommon, and their superficial similarity to earlier forms is also obvious.

Fig. 13 is the specimen of the rim of a bowl with a button-handle upon it, and in fig. 6 a true ledge-handle will be seen. Fig. 7 is a rough lump, apparently the end of a loop-handle with the tongue by which it was secured to the vessel.

Combed ornament also once more comes into use: Fig. 3 is a very characteristic form, which is common in modern pottery. On the other hand, burnished ornament was seldom, if ever, noticed as old Arab ware from the neighbourhood of Gezer, and it is rarely used in modern ware. Moulded and incised ornament, though not unknown, is not very common: there is a specimen of the latter on the upper surface of the ledge-handle fig. 6.

The coloured decoration consists of broad bands forming panels of various shapes—rectangular, triangular, or circular—which are then filled in with linear patterns in firmer lines. These may be frets, lozenges, or arrangements of parallel lines. Angled spirals are found, either wholly rectilinear, as in figs. 8, 22, or partially curvilinear, as in fig. 15. I did not find any example of a continuous curve spiral. Some of these linear devices bear a quite startling resemblance to the painted ornament of the Second Semitic Period. Fig. 18, for example, is a well-known pattern, as also is fig. 19. But though it is quite possible to mistake the period of some individual examples, a small collection of Arab painted sherds could never be mistaken for Second or Third Semitic. It is, however, difficult to put into words the differences, which are obvious when the actual sherds are compared. The slip and the paint have a fatter, richer texture in the Arab ware than in the Amorite, and the painted devices are more geometrical, more mechanical, and also more minute and "finicking" in the later than in the earlier pottery.\* The well-known vessel obtained by De Saulcy in Jerusalem and now deposited in the Louvre (Perrot & Chipiez, vol. iii, p. 478 of the French Edition *VC*, p. 298) is unquestionably Arab. The same is true of two sherds figured *VC*, p. 299 (from the *Recovery of Jerusalem*).

Glazing never becomes common in Palestine till the Arab Period. It may be monochrome or polychrome. Usually lines are incised, coloured a different hue from the background (*eg* brown or green or yellow). Stamped ornament is common. The most frequent pattern is the die shewn in fig. 24. A cylinder producing a continuous pattern, half floral, half geometrical, is sometimes rolled over the pottery. Fig. 37 is a small fragment illustrating this. In fig. 381 is a sherd of a large vessel that was found with a small fourteenth-century Cufic coin on the mosaic floor at

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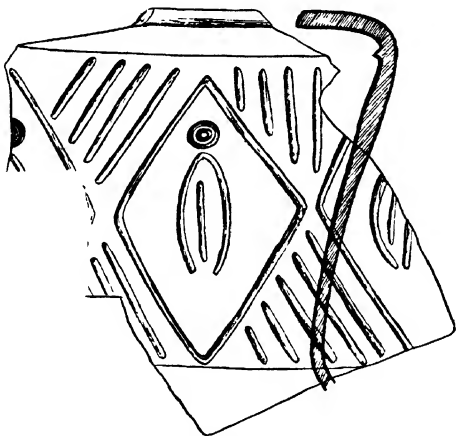
\* A few other objects from the same cave as the pottery we have been describing are also shewn on Plate clxxxix. They are a couple of knives in iron (figs. 26, 27); two bracelets in bronze (figs. 28, 32), and another in iron (fig. 29); finger-rings in iron (fig. 30), and bronze (figs. 35, 36); two beads of enamelled paste: the one green, the other yellow and green. The oblique line of junction between the two colours in the latter specimen is common. Fig. 34 in bronze is perhaps the blade of a plane, with a slot to allow it to be lengthened or shortened. The illustrations speak for themselves and require no further description.

Hill, which illustrates the use of incised lines forming geometrical

ribbing is as common in this period as in the Roman, but it seems  
e. Though I cannot lay it down as a certain and invariable rule,  
ession that the ribbing of Roman pottery has a rounded nosing to  
n Arab pottery they are cut sharply off and have a plane surface.  
Pl. clxxxix will explain this.

#### (4) *The Plastic Arts*

culars that have already been given, at the beginning of Chapter VI,



FRAGMENT WITH INCISED ORNAMENT, ARAB PERIOD

pected in the figures of animals, will have shewn the  
most trivial attempts at modelling are to be looked for  
from a Palestinian tell. Even in the Hellenistic Period,  
the potters had under their eyes models in the shape of  
under classical influences, we find the native attempts  
of animal figures in clay to be childish in the extreme.  
I speak of the figures with reference to their technique,  
without consideration of their significance.

I treat the periods separately, as I cannot find that there is  
any special character to distinguish the productions of one

period from those of the rest. All are of the same uniformly lo conventions of one age are preserved throughout

Very few figures appear before the Second Semitic Period. 1 from cave 3 III (Vol I, p. 78, fig 24) remains unique, both in its e some of its characters—especially the simple perforations to deno open mouth, and the prognathous lower jaw.

With regard to the human figures, from the Second Semitic Pe. following generalizations may be made.

(1) Very few perfect specimens were found, so that it is not eas the whole body was treated. The simplest and one of the common

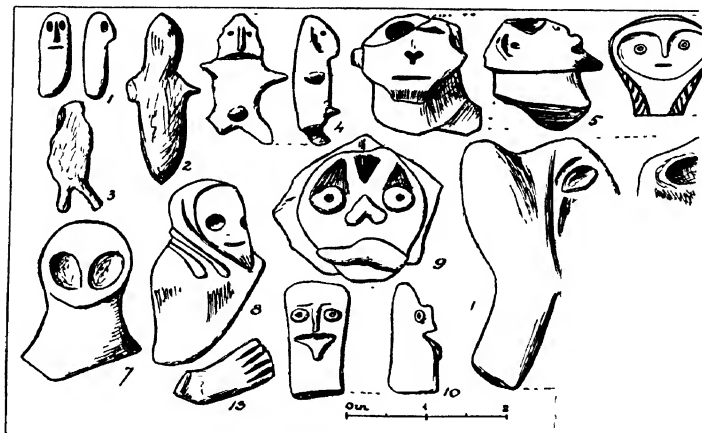


FIG 382—POTTERY REPRESENTATIONS OF HU

mere torso without limbs, as fig. 382, no 1. To this commonly legs as in no 2, 3 [V 30] or both as in no

(2) The almost universal absence of the beard other indications, that the artists were principally c A painted beard appears in the peculiar grotesque fig below modelling of the beard as in fig. 382, no 5 [V into existence before the Fourth Semitic Period. In of soft limestone, there is a beard and, most unusual the figure is rather suggestive of the "old man wrapp the witch of Endor. No. 9 [Second Semitic] is ver

\* No. 8 is in soft limestone.

a heavy pair of moustaches with no beard. It is modelled on a fragment that seems to be the false neck of a large Bügelkanne of local manufacture.

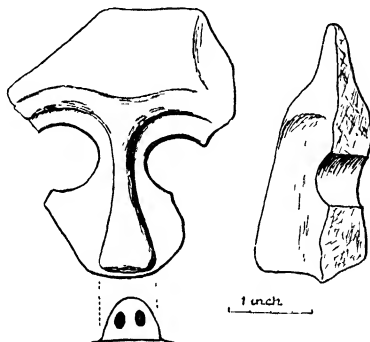


FIG 383.—POTTERY MASK

(3) The upper part of the face is generally fashioned by pinching two hollows in the sides, which indicate the eyes; a prominent beak-like nose is produced by the same process. The mouth is often absent, as in no. 7 (which is a type found

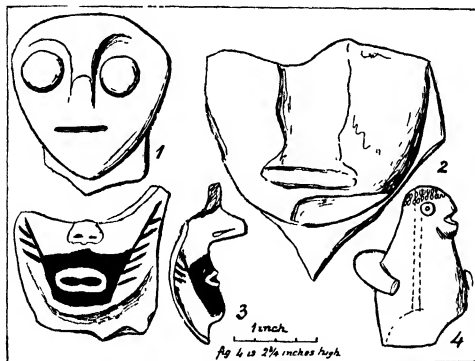


FIG 384.—POTTERY REPRESENTATIONS OF THE HUMAN FIGURE FROM THE LATER STRATA

in all periods), though it is more frequently indicated by a simple horizontal scratch as in no 12 [V 30]. In this case, as in many others, pellets are affixed to the hollows

to represent the eyes more definitely: this we have already seen to be done in the case of animals. In a few specimens (as is also the case of animal figures) attempts are made to mark the anatomical details of the eye. No. 11 [V 9] is a more elaborate specimen of this kind of face, with the mouth open, the lips indicated by an oval groove, and the eyes represented by hollows. Evidently this head was stuck in a mortice in the neck of the body, which, however, was not forthcoming. The Phrygian cap is represented on this specimen. No. 6 shows some other slight differences of detail in the treatment, and has a braided headdress. In no. 10 [III a 28] the tongue appears to be protruded.

(4) More ambitious attempts at representing accurately the outline of the faces are not unknown, even in the early periods. A curious mask of pottery may here be referred to. It was found in II 5, but probably belongs to the Second

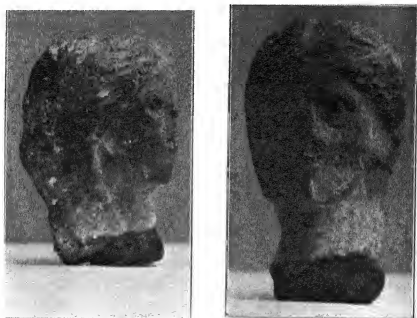


FIG. 385.—HEAD OF A CLASSICAL FIGURINE IN TERRA COTTA

Semitic Period. The middle part of the face alone is left. As will be seen from the drawing, fig. 383, it has holes for the eyes, shewing apparently that it was meant to be worn like a modern toy mask of cardboard; though as there is no depression on the back for the nose of the wearer to fit into, it cannot have been worn very close to the face. The nose is straight and the brow-ridges very prominent. The eyes are rather close together. The object in its present condition measures  $3\frac{1}{2}$ " by  $2\frac{1}{2}$ ".

As a rule, however, it is not till the Hellenistic Period that the potters attempted to represent the human face accurately in their smaller figures. They were by no means emancipated from the "bird-head" form which is very common even in this latest stratum: but the three examples in fig. 384, nos. 1-3 shew that they were striving after better things. In no. 3 of these a black beard is painted on the red surface of the ware. No. 4, from the Fourth Semitic or Persian Period, also to some extent breaks away from the "bird-head" type. This object is drawn to a



smaller scale than the others in the figure: it is  $2\frac{1}{4}$ " high. The figure was hollow, and a tube runs up to the top of the head, as shewn by the dotted lines. Note especially the representation of *hair*, which is uncommon in these rude figures. No doubt this was under the influence of classical models. No really good classical figurines were found, but some fair specimens, probably from the ateliers of Asia Minor, came to light. Such are the head fig. 385 and the charming little group, representing a mother suckling her infant son, fig. 386. The upper half of the statuette alone remains: it is 3" in height. The mother's figure is attired in chlamys and himation, the latter drawn back revealing the hair confined by a band. The child's figure is undraped. We may also refer to the torso fig. 387: it is noteworthy that a poor local attempt to imitate a very similar draped figure was found.



FIG. 386.—TERRA COTTA FIGURINE



FIG. 387.—TERRA COTTA FIGURINE

(5) Hands and feet, when indicated, are of the "rake" type to be seen in the drawings of young children. See fig. 382, no. 13 for an example. The sex of the figure, whenever indicated at all, is always emphasized.

A very curious group of objects was found in débris at the S. end of trench 29, above the inner city wall. They were dated by a fragment of a green porcelain vase, bearing the name of Ramessu II (fig. 388). They included the following objects:—

(1) A model of a bird (? a duck) of light yellow pottery, hollow, with short expanded wings, and with legs doubled up and attached along their whole length to the lower side of the body. The figure is ornamented with straight and zigzag lines painted in black and red, and with a red network on the breast having a black dot in the centre of each space. The eyes are small pellets moulded separately and stuck on; a small patch of red colour surrounds them. On the back is a loop

for suspension, and under each wing is a perforation. Four aspects of this model are shewn in fig. 389.

(2) Fig. 390, no. 1. A segment of a circular tube of pottery. If complete, the circle would have an internal diameter of  $5\frac{1}{2}$ ", about one-third of the circumference remains. The external diameter of the tube is  $\frac{7}{8}$ ". The pottery is of a light Venetian red colour: the upper half of the tube is ornamented with short strokes alternately red and black. Attached to the tube, and with hollow bodies communicating with its bottom, are alternating figures of birds and pomegranates, one of each remaining \* there appear to have been six in all. The pomegranate is represented by a little jar, with mouth pinched in and having four points, and with four hollows in the sides. There appears one attachment of a handle, but no second attachment, perhaps it crossed over and joined one of the other pomegranates. The bird is of the same general character as that just described: it has lost its head, but on the other hand



FIG. 388 —FRAGMENT OF AN EGYPTIAN VASE

preserves the curious flat fish-like tail. The pomegranate is coloured dark red all over. the bird is ornamented on the back with a chequer of red, black, and uncoloured squares†

(3) Fragments of another object identical with this in style but of larger bore were found in the same place. Only one pomegranate remained: in all respects similar to that described above. There was also a considerable fragment of a much larger tube, also painted with black and red strokes, but shewing no sign of having had figures attached to it. These tubes are very likely ornamental lamps, the oil being poured into the tube and the wick protruding from the pomegranates.

\* Another tube of the kind was found elsewhere in which there had been a series of short vertical pipes terminating in spouted animals' heads (something like Pl. cxxiv, fig. 8) looking outwards.

† It is curious that there is a similar row of birds and cups alternating on the brim of a bowl found in an early Iron Age tumulus at Odenburg: see the illustration in Déchelette, *Manuel d'archéologie*, vol. II, p. 479.

(4) Broken remains of a saucer-rim, with one pomegranate adhering to it were also found here.

(5) Fig 390, no 2 A tube similar to the above, 1" in diameter, and similarly ornamented but terminating in an animal's head. The total length of the fragment is 2" the nose is broken away

(6) Fig. 390, no 4 represents one of two fragments of a tube similar but larger and coarser. The external diameter of the tube is slightly over  $1\frac{1}{2}$ ", the internal diameter of the circle is much the same as no 1. There is one pomegranate remaining, there seem to have been originally five, which, as in the other examples, communicate with the hollow in the tube. The pottery is thick and gritty, black in the broken sections, and covered all over with an Indian-red slip

(7) No 3 is a small cylindrical jar with narrow mouth, covered with a fat cream-coloured slip decorated with pale-red lines and zigzags. It has lost the lip of its mouth and two ear-handles.

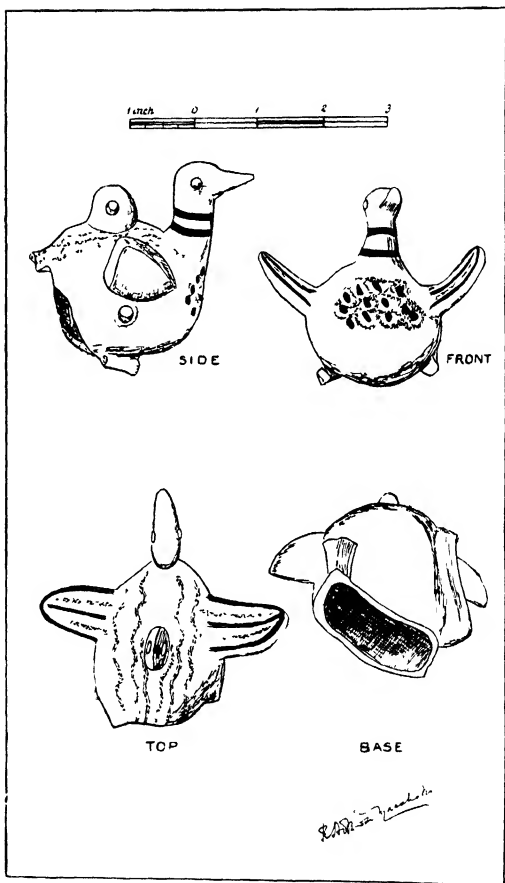


FIG 389 — BIRD FIGURE

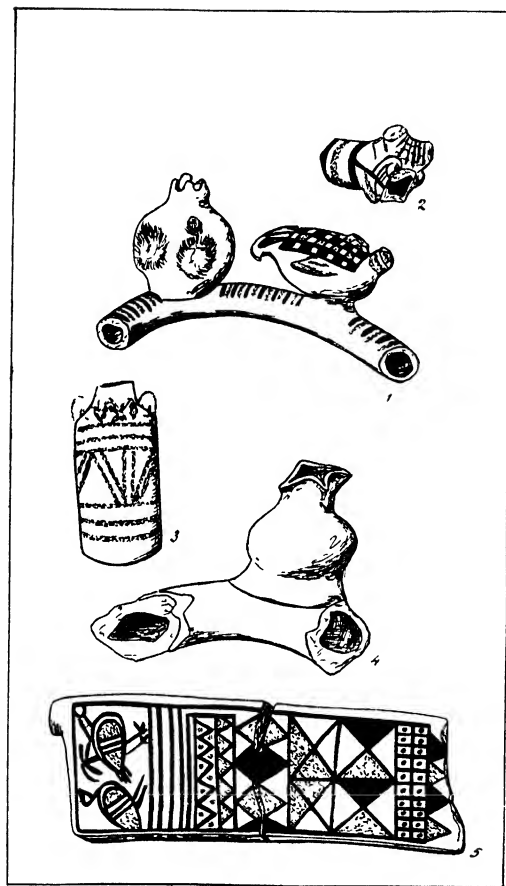


FIG 390—GROUP OF POTTERY OBJECTS

(8) No 5 is the lid of a casket in pottery. One end is broken off, the other shews a horn that fitted into a socket in the mouth of the casket. The surviving portion is  $7\frac{1}{4}$ " long,  $2\frac{1}{2}$ " broad, and  $\frac{3}{8}$ " thick. The pottery is of a Venetian red colour with a cream-yellow slip. The ornament, of birds, zigzags, double axes, etc., is as shewn in the drawing.

(9) The figure represented in fig. 271 above also came from this store. We have already described its dress. The only additional points to be noticed are: its ware—light reddish, with a fat cream slip, the hole through the chest, doubtless to allow the object to be suspended on a wall by means of a peg driven through it; two holes—one on the back, the other under the chin, probably to allow steam to escape while firing, the moustache, short beard, and protruding tongue—especially the former, as repre-

sentations of the hair of the face are not common. The eyes are conical protuberances, with a round dot on the apex to represent the pupil, around which is

a black circle for the iris. The brows are continuous across the face: a red line emphasizes the ridge of the nose. The tip of the nose is fractured, and the paint on the mouth and chin much worn. On the neck is a chain of seven pendent beads.

A reference should also be made to the lamps (or feeding-bottles?) in the form of animals, so very common in the Second, Third, and Fourth Semitic strata. Fig 391 *a* is a good example. Compare also the bird figure already described (p. 16). The use of animals' heads as spouts for vessels (as in fig. 391 *b*) may likewise be mentioned here.

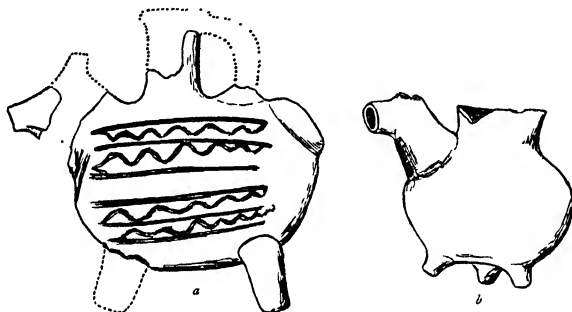


FIG 391—VESSELS WITH ZOOMORPHIC TREATMENT

### (5) Glass

The use of glass begins in the Third Semitic Period with ornamental coloured specimens, all imported from Egypt. These were either in the form of vases or, more commonly, beads. Of the latter we have already sufficiently spoken. The former were as a rule decorated with waves of colour running through the texture of the glass, as is common with Egyptian vessels of the period. They were all, however, broken, and as a rule only small and incoherent fragments were found, that told nothing about the original shape of the vessel. Only one could be reconstructed to any extent, it is shewn in fig 392. Even this only held together for a short time, for the substance of the glass was so much decomposed that it was impossible to cement the fragments together permanently. The surface had in most cases assumed a dull calcareous hue, and it was necessary to wet it to bring out the original colours. Very often this wetting completed the destruction and reduced the glass to dust. The colours of the fragment illustrated were grey, white, and yellow—the latter is represented by *black* in the drawing.

Clear glass first appears at the beginning of the Fourth Semitic Period. A small vessel, square in section, was found, as already noted, in the Philistine grave no. 2. This material is, however, rare in the inartistic Fourth Semitic Period. The ribbed sherd fig 393 no. 1 is the best example that it produced. An interesting

little fragment, apparently of the Persian Period, is shewn in no. 2. This is a fragment of blue glass, with planes of yellow glass radiating through it. It is the first example of the use of a polychrome treatment of glass after the Third Semitic Egyptian importations. In the Hellenistic Period we must specially notice the handsome "wine-glass" no. 3, which was found in VI 29 in fragments: it is in clear glass. Some coloured scraps were found here and there, with blue, white, and yellow zigzags alternating upon them, and similar simple patterns. It is not, however, till the Roman and Byzantine Periods that glass becomes anything but a

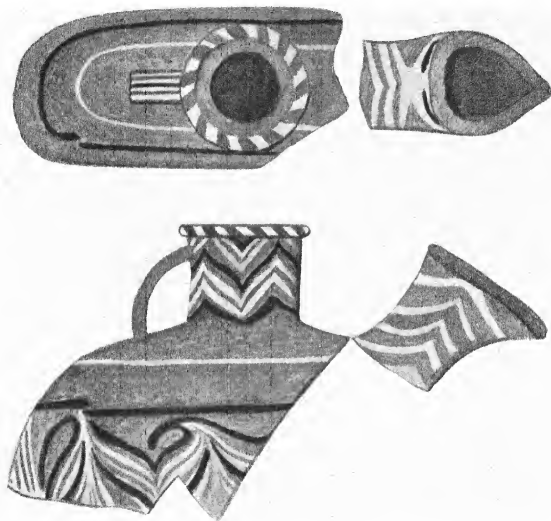


FIG. 392.—FRAGMENTS OF AN EGYPTIAN GLASS VASE

rarity. The tombs of this period yield a good many objects in glass, some of which are illustrated in Vol. I, and in the Plates. See fig. 166 (bracelet), fig. 189 (the glass lamp), fig. 192 (ointment vessels), Pl. lxxii, figs. 18-20, Pl. lxxviii (some small fragments), Pl. lxxix, figs. 30, 31, 37, Pl. xciv, figs. 6, 7, Pl. xcvi, figs. 1-7, Pl. cii, figs. 7, 8, Pl. cvii, figs. 23, 24, Pl. cviii, fig. 7, Pl. cix, figs. 17, 19, Pl. cxv, fig. 5, Pl. cxix, figs. 5, 6, 25, Pl. cxx, fig. 16, and especially Pl. cxxiii. From these a sufficiently good idea can be obtained of the forms of the late glass vessels found at Gezer. None of these were particularly striking; much finer examples have been found elsewhere in the country—unfortunately, for the absurd prices paid for

these vases have more than anything else led to the depredations of the tombs by natives in recent years.

§ 31.—THE CARPENTER, JOINER, AND WORKER IN BONE AND IVORY

Unlike the potter, whose work has survived though his tools have perished, the carpenter is known to us by his implements only. The definition of "carpenter" is here extended, for convenience, to include under one heading the work of tree-felling and shaping the timber both roughly and finally. The joiner fitted the pieces together, and, as we shall

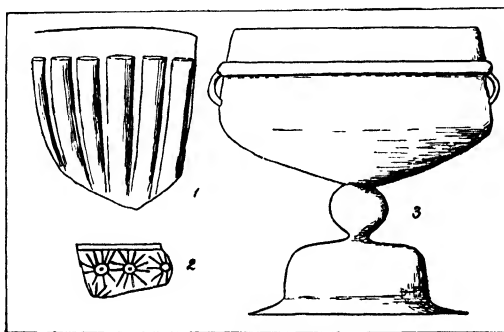


FIG 393.—SPECIMENS OF GLASS

see, an important part of the work of the artificer in ivory was to ornament the finished object.

There is, so far as I know, no evidence in modern custom or tradition of the use of fire for felling timber, as in other early communities: on the contrary, such passages as Deut. xix 5, Ps. lxxiv 5, Isa. x 15, shew that *axes* were used for the purpose. Numerous fine examples of these were found, and a representative series will be found on Plate xcii. There are two types. In the first type the sides of the blade taper regularly from edge to butt; the edge is curved, and generally projects slightly beyond the sides of the blade; the butt is, as a rule, cut off square, but is sometimes slightly concave; stop-ridges crossing the face of the blade are very rarely found, in a few specimens the butt is perforated for receiving a thong by

which the axe-head was lashed to the handle (how necessary this was is shown by the passage in Deuteronomy just referred to: compare also II Kings vi 5).<sup>\*</sup> In the second, the sides of the blade are concave, culminating in cusps between the middle point of the blade and its butt. From these cusps the sides taper in more or less straight lines, as in the first type. A stop-ridge sometimes crosses the face of the blade, running between the cusps. No perforated examples of this type were found at Gezer.

The edges in both types are usually bevelled on the two sides like the edge of a turn-screw, but a few cases of chisel-edging, with the bevel on one side only, were observed. In several cases, owing to imperfect fusion between the two halves of

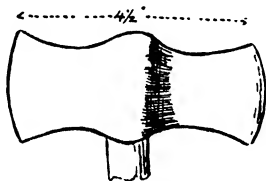


FIG 394 —DOUBLE-EDGED AXE-HEAD

the moulded bronze, the sides of the edge had separated by the contraction of the metal. The lengths of the axe-heads found range from  $3\frac{1}{2}$ " to 9"

A double-edged axe,  $4\frac{1}{2}$ " long, was found in **II 20** (fig. 394). It still retained a fragment of the wooden handle. A specimen of the Egyptian twelfth-dynasty type of axe-head with projecting horns, which serve the purpose of stop-ridges, was found in **III a 28** (Pl. cxcii, fig. 10). Another Egyptian form, found in conjunction with the grotesque statuette fig. 271 (*ante*, p. 77), and therefore of the period of Ramessu II, will be seen in Pl. cxcii, fig. 9. The second type seems on the whole to be commonest in the Fourth Semitic Period, though, as the figured examples shew, it appears much earlier.

Certain thin plates of bronze, cut to the shape of axe-heads, were found here and there, making their appearance first in the Second Semitic Period.

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<sup>\*</sup> Axe-heads such as these persisted to so late a date that it is not a serious anachronism to quote these Biblical passages



These appear to be votive models of axes, perhaps dedicated in commemoration of some military exploit. See *post*, p. 376.

As to the other axe-heads on Pl cxcii, fig 1 was found in VI 16, fig. 2 in IV 4, figs 3 and 4 together in V 3, fig 5 in IV 17, fig 6 in III 20, fig 7 in III 17, fig 8 in II 17. Fig 11 may be a chisel or punch, it is rather too small for an axe, being only  $3\frac{3}{4}$ " long. It was found in waste earth. Fig 12 is one of a fairly large number of miniature axe-heads that were found throughout the Semitic strata, from the Second onward. On Plate ccxviii will be found two remarkable examples. One (fig. 11) is an uncommon variety of type 1 with a well-marked entasis in the sides. This is a striking example of the faulty casting above alluded to. It comes from III 17. The other (fig 12), from early Fourth Semitic Period debris at the north end of trench II, is also of type 1, but remarkable for being made of iron, a very rare material for

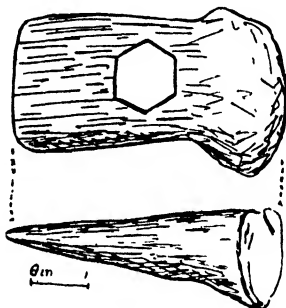


FIG 395—HORN AD71

axe-heads at Gezer. It will be seen how completely the normal shape of bronze axe-heads has been translated into the new metal.

The axe was probably also used for roughly shaping the felled timber, at least during the Semitic periods. For this purpose smaller axes, such as Pl. cxciii, fig 1, from II 30, were very likely used. Iron *choppers*, with a tang for fixing in a handle, were introduced apparently with the introduction of iron in the end of the Third Semitic Period. Pl. cxciii, figs. 2 and 3 are specimens, the former from IV 18, the latter from the Hellenistic Period. I cannot find evidence of the use of the *adze* by carpenters\* before the

\* Adze-shaped tools of *horn* are found at an early period. One such (Pl. xxxiv, fig 31) was found in cave 28 II. Another, from the Fourth Semitic Period, is here shown (fig 395). These, however, were probably quarrying tools.

Hellenistic Period, and such as came to light were all of iron. Pl. cxci, figs. 4 and 5 are specimens. *Hatchets*, also, of which Pl. cxci, figs. 6, 7, and the remarkable fig. 8 (the latter from VI 29) are specimens, first make their appearance in this period. The small iron implement fig. 9 seems to be a soldering tool; possibly quite modern, in any case not very ancient. It was picked up on the surface of one of the hillsides.

Nothing that could be identified as a *plane* or any part of one was found, except the Arab example Plate clxxxix, fig. 34; and the *saw* was represented by very meagre fragments. This is what we might expect: the modern European saw is only a recent importation into Palestine, the ancient native saw being a thin flexible strip of metal, stretched in a frame like the modern fret-saw. A few very finely serrated flint saws were found, as has already been noted in § 29; these were perhaps used for cutting small implements or ornaments of bone. Pl. cxci, fig. 10 is another good specimen of these, from the rock surface, and others will be found in Pls. cxxxviii, cxxxix. Fig. 11 is a bronze saw which is practically a knife with the edges nicked. It is 1' 2" long—an unusual length. This comes from Third Semitic debris. Fig. 12, also bronze, with serration on both edges, was found in II 4.

An important tool in the armoury of the carpenter was the *chisel*, of which a fair number were found in all strata. These were generally of bronze, even in the Hellenistic stratum. Two kinds are found, tanged and socketed. The edge usually expands slightly beyond the sides of the shaft, and is a little rounded.

Socketed chisels are usually found in the Fourth Semitic and Hellenistic Period: Pl. cxci, figs. 13 [V 28] and 14 [V 4] are specimens. Fig. 15 [IV 28] is an unusually early specimen, and, what is still more remarkable, is made of iron. The fine specimen shewn in fig. 276 (*ante*, p. 85) is also early. Fig. 396, in iron, from the Hellenistic stratum, shews a different method of treating the socket from those just mentioned. Figs. 16–19 are specimens of the tanged chisel: 16 being from II 28, 17 from a Second Semitic cistern in trench 19, 18 from VI 3, and 19 from VI 4. It will be noticed that they are all meant to fit into a movable handle, having an entasis in the middle to prevent the handle slipping down too far. In fig. 19 this entasis develops into ridges. The form fig. 17, with an expanding spatula-like blade, is uncommon. A few bronze chisels have a flat nail-head; Pl. cxci, fig. 7, from V 17, is an example.

In Pl. cxci, figs. 2–6, some specimens of iron chisels are to be seen.

These are all from the Fourth Semitic or Hellenistic Period. Fig. 2, from the Hellenistic, is larger and more massive than usual; it expands downward, unlike fig. 3 [V 18], which expands upwards. Fig. 4 [VI 18] resembles fig. 2, but is of smaller and a more normal size. In fig. 5 [VI 16] there is an entasis. Fig. 6, from Fourth Semitic, is an example of the expanding type which we have already seen in bronze.

Small chisels, perhaps more properly *punches*, are also common. These are of bronze, square in section, of uniform thickness, at most 2" long, and ending in a chisel or turn-screw head. Pl. cxcii, figs. 21-24, (all from Third Semitic except 23, which is from V 29) are typical specimens: but a round-stemmed punch like fig. 20 (also Third Semitic) is rare.

*Hammers* were made of stone. These were massive circular discs, about 4½"-6" in diameter, with a countersunk hole through the middle for

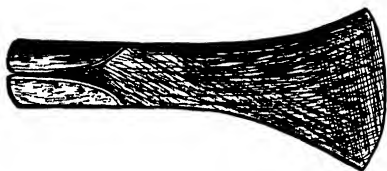


FIG. 396.—IRON CHISEL

the handle. Such objects were among the commonest tools found, and were found in all strata. A few rectangular specimens were unearthed, but these were comparatively rare. Numerous unfinished hammer-heads were discovered, with the depression begun on each side, but the perforation not carried through. It is possible that some of the latter may actually be complete, being meant for grasping in the hand; the depression being intended to give a purchase for the fingers. But this explanation will not answer in a good many cases where the rim is too wide for the fingers to reach. Only one bronze hammer-head was found (Pl. cxciv, fig. 1), a pyramidal mass of bronze from IV 2.

For fitting pieces of timber together to form completed objects, the ordinary mortice and tenon joint must have been used. That it was familiar is shewn by its use in bronze and bone objects that have survived. Of course no wooden specimens remain; nor can we say whether any form of glue was used or, if so, what was its composition.

Holes were bored with *awls*, usually of bronze, though sometimes, in the later strata, of iron—narrow tapering rods of metal set in a handle made of some long bone or a piece of horn (as fig. 397). Examples are Pl cxciv, fig. 8 from **V 8**, fig. 9 from **V 18** (an iron awl in an ornamented handle, which however has been partly destroyed by fire), and fig. 10, also iron, from **V 29**. Bone handles for carpenters' tools of various kinds were common, and often elaborately ornamented with linear patterns or punch-marks; figs. 11-14 are examples, all from the two uppermost strata.\* Often, however, the handle is quite plain, or merely polished. In the latter case the line of polishing sometimes runs spirally up the shaft like a screw-thread. It is probable that awls were sometimes heated to make them pass through the timber without splitting it; this is a frequent custom to-day.† Some of the smaller awls may have been the tools of shoemakers. It is likely that the *bow-drill*, one of the chief tools of the modern oriental carpenter,



FIG 397—BONE AWL-HANDLE

was in use. A fragment of a bone pin with a slight depression in the surviving unbroken end shewed that some form of lathe (perhaps worked by a bow) was in use for turning such objects.

Nails were found in profusion, both in bronze and in iron. Bronze, at first used exclusively, was retained to the end for the finer nails, the ironsmiths of Gezer never having attempted to make any but the clumsier or larger examples of their metal. Nails appear in iron, however, as soon as the metal itself is introduced.

Specimens of bronze nails will be seen in Pl cxciv, figs. 14*a*-22, illustrating

\* The bone hafts were not always perforated at the ends, though this was the usual way of fitting them. Some cases were found of a perforation through the sides; in these the handle must have been a T-head like that of a modern gimlet. In a few the haft was not pierced at all, but cut so that the butt-end of the tool would lie flush with the outer surface of the handle. Pl cxciv, fig. 39 is an example from the Third Semitic stratum. Some large specimens of this form of handle made of stag's horn, were found. In **V 7** the head of the ulna of a cow was found with ten holes drilled through it, presumably to make a handle to tie to something.

† Some of the bone objects with fine linear ornament upon them shew marks of fire in the neighbourhood of the lines, as though they had been cut with red-hot tools.

the various types found. The shank is usually square in section, though round shanks, such as fig. 19 from IV 29, are not uncommon. The point tapers, usually to a pyramidal or conical point; it seems often to have been blunt, although the apparent cases of this may be imperfect. A chisel point is comparatively rare; fig. 21 [IV 4] is an example, if indeed this specimen is not to be considered as a punch. The heads also vary in size and shape. Flat domed heads, such as 14 a, [Fourth Semitic] and 15 [VI 16] are fairly common, especially in the upper strata, a flat cylindrical head as 16 [Fourth Semitic] is also not infrequent. The high domed head of 17 [V 28] is, I think, much less frequent. Commonest of all are the small domed heads of 18 [V 12] and 19. In 20, 21 [IV 4] the head is reduced to a slight expansion. Fig. 22, from the Hellenistic Period, is a translation into bronze of a form more common in iron, with a right-angled head. Iron nails are illustrated in figs. 23-36. In these the square-sectioned shank is still the commonest, the round section being found only in the coarsest and clumsiest specimens, as fig. 23 [VI]. The flattish dome-shaped head is yet commoner in iron than in bronze; 23, 24 [VI 12], 25 [VI] are examples. Note the chisel point of the last specimen. A polygonal head, as in 27 [waste earth] is not uncommon. Specimens of hook-heads, far commoner in iron than in bronze, are seen in 26 [VI] and 35 [VI 29]. Fig. 28 [V 12] is an unusually small specimen, and 29 [V 30] is remarkable for its unusual cushion-shaped head. Fig. 30 [VI 11] is an unusually well-made example, with long slender stem; note the inverted cone-shaped head. Fig. 31, also from VI, has a cushion head, but of a more normal type than that of fig. 29. Fig. 32, from VI, shews the bent condition in which most nails are found. Probably these large nails were principally used in constructions within the houses themselves (doors, roofs, etc.), and became distorted with the fall of the structure in which they were fastened. The peculiar swelling nail fig. 34, from VI 3, is unique at Gezer. Figs. 33, 36, one with a roll-like head, the other with a spiral coil (as though it were intended for securing a ring to a wall, such as is used for tying horses to when left outside doors), were picked up on the surface. They are not much corroded, and may be quite modern. The spade-like point of fig. 38 is a late characteristic. This may, however, be some kind of punch rather than a nail.

Fig. 37 is an example of a bronze holdfast, of which a few specimens were found. This one came from VI 4.

That paint and some form of carving were used to decorate the wooden objects made can hardly be doubted, but of these nothing has survived. We may, however, here refer conveniently to a very common form of decoration found throughout the Semitic and Hellenistic periods. These are rectangular strips of bone or ivory, on an average about 2" long, usually with rivet-holes for affixing them to the surface decorated, and on the exposed side decorated with linear or punched ornament. As these objects were *never* found associated with metal rivets, we may assume it as probable that wooden or bone pins were always employed to fix them in position. The ornament

consists of rows of small punched circles, with dots at their centres; of diagonal lines occupying a part or the whole of the surface; of frets; or, more rarely, of longitudinal lines parallel to the longer sides of the rectangle. These ornaments are sometimes filled with a black enamel, but this is comparatively rare. Occasionally such strips are found quite plain; it is probable that these formed a part of some concerted scheme of ornamentation; this is probably also the explanation of slips of unusual shapes, sometimes unsymmetrical. Very common are slips with one end cut off at an

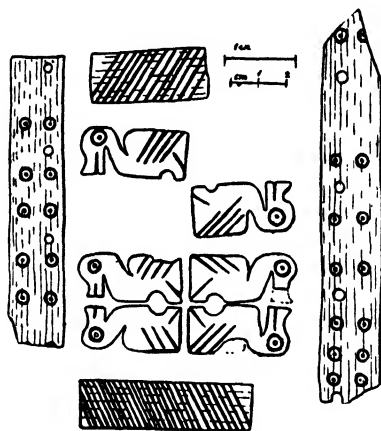


FIG. 398—SET OF IVORY INLAYS

angle of 45 degrees. These, no doubt, were meant to mitre at right angles with one another. Frequent also were minute pieces of polished shell about  $\frac{1}{4}$ " square, which probably were similarly used for inlays.

It was not necessarily the carpenter only who made use of these decorative objects. They might also be used for ornamenting bronze, *e.g.* the hilts of swords or daggers. But inlaying is still an important item in the ornamentation of Damascus furniture, and this is on the whole the most suitable place in which to describe these ornaments. Examples will be found on plates xxvi (fig. 11), xxxiv, and cxcv.

The series of inlays figured on Plate cxcv shows the size, shape, and ornamentation of these objects. Fig. 22 is unusually large, being  $5\frac{1}{2}$ " long. On the other hand, fig 18 is unusually small. They are sometimes found in groups. Figs. 4-13 are such a group, no doubt once the ornamentation of some special object, they were found in a house in E. Hill, where was a collection of objects, silver bracelets, etc., elsewhere described\*. So are figs 34-39; so also are 21 and 22, 31 and 32, 55 and 56, 57-60. The last group shows specimens of the shaped inlays, mitred for turning corners. Figs 28 and 29 represent a collection of twenty such slips, 28 representing two of them, and 29 the remainder. This was the largest collection found. No progressive chronological sequence can be detected in the ornamentation; all forms are used indifferently at all times. This can best be shown by the table of provenances here subjoined.

	First Semitic	Second Semitic	Third Semitic	Fourth Semitic	Hellen- istic
<i>Linear Patterns</i>					
(a) Parallel diagonal lines covering field	—	26, 28, 36	—	43	—
(b) " " " on part of field	1	35	4-13	—	—
(c) Single diagonal lines in both directions	18	37	—	19	—
(d) Diagonal lines in both directions grouped in a V or zigzag	—	29, 31, 38	—	47	—
(e) Diagonal lines in both directions grouped in a fret	—	34†	—	—	51
(f) Lines parallel to the long sides of the slip	—	—	65, 66	—	—
(g) Lines parallel to the short sides of the slip	—	—	—	20, 40	—
(h) Combination of (f) and (g)	—	—	—	2	—
(k) Herringbone	—	22	—	—	—
<i>Circular Punch Marks</i>					
(l) Alone	17, 33	15, 21, 32 39, 52	24, 56	23, 41, 46, 54	—
(m) Combined with arcs of circles	—	—	3	48	—
(n) Combined with (b)	25, 50	—	—	27, 53	30
(o) Combined with (d)	—	42, 44	16, 55, 57-60	—	—
(p) Combined with (e)	—	45	—	—	—
(q) Combined with (f)	—	—	49	—	—
(r) Combined with (g)	—	—	—	14	64

Fig 73 is also a four-sided inlay, but instead of having incised ornament upon

\* See p. 99

† A small slip in porcelain decorated like this example, and united at both ends, was found in the Third Semitic Period. It was probably of Egyptian origin

it the whole surface is raised, pyramid-wise. This is of the Third Semitic Period. Figs. 61, 62, 72 are inlays of a different shape, with circular and linear patterns. The circles are evidently struck with a compass, the centre dot of which is distinct. These are from Fourth Semitic débris. The long plain slip fig. 63, from II 4, may possibly be a *ruler*, rather than an ornamental inlay.

Figs. 67-70 are Egyptian. Fig. 67, in cyanus, was found at the entrance to the Water-passage. Fig. 68 is in cloisonné enamel, the divisions of the cells are greenish white, the spaces dotted in the drawing are yellow, hatched red, and double hatched

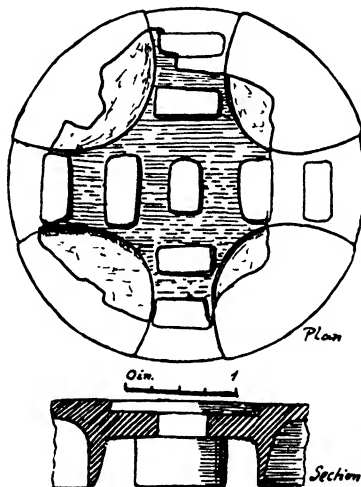


FIG. 399.—FRAGMENT OF AN IVORY OBJECT

indigo. It came from III 30. Fig. 69, also cyanus, came from II 29. The flat bone plate with a lotus incised on it, fig. 70, is from IV 10. Fig. 71 is an ivory disc, with circles and diameters as shown. The small circles at top and bottom are rivet-holes. It came from IV 30. The small shaped slip of bone fig. 60a, [II 28], the enamelled rosette, white and dark grey, fig. 61a (waste earth), and the green enamelled slip with the cartouche of Ramessu X, fig. 74 [V 6] are likewise Egyptian.

The series of inlays here illustrated (fig. 398) were found in early Third Semitic débris. They were laid in the earth in the disposition in which they are here drawn; except that the two longer slips, ornamented



with punched circles, were on edge. This has every appearance of having been the adornment of the lid of a wooden casket, or some such object. There were eight bird figures, two of which had perished, facing one another in symmetrically disposed pairs, above and below were slips with oblique lines, while vertically, on the edges of the lid, were longer slips with punched circlets. The slips had, no doubt, been inserted in sinkings prepared for them, and were no doubt fixed with wooden pins, as metal would have left some trace behind.

No specimen of a *compass* was discovered in the works. Its use is, however, traceable in the inlays (as figs. 48, 61, 62, 71, 72), and in circles struck on potsherds, ossuaries, etc.

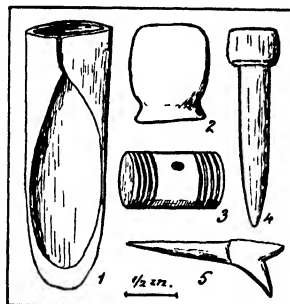


FIG 400 —BONE OBJECTS

Among items of domestic furniture of ivory may be reckoned a curious object found in a cistern, and here represented (fig. 399). It was found in many fragments, insufficient for complete restoration. The central part is sunk, and contains nine holes, arranged in a cross; it is bounded by four raised semicircular discs, prolonged downwards on curved feet, on which the object stands. It is probably a support for some decoration of a house. It is, however, not altogether certain that the original shape was circular, or how the edge was finished off.

Of the more ordinary objects made by the worker in bone and ivory—ornamented pins and pinheads, spindle-whorls, etc.—we have already spoken sufficiently. Fig. 400 shows a few other specimens. No. 1 is a scoop or

gouge, from **V 29**. Nos. 2, 3 are pinheads, the latter being of the gimlet-head form above mentioned. No. 4 is a pin or nail of bone, trimmed with a knife, several specimens of this kind came to light. No. 5 is the incisor tooth of an animal, in which a nick has been cut for some purpose. All these except no. 1 came from the Hellenistic stratum.

Many of the knobs of quartzite or alabaster with which furniture was decorated (fig 401) came to light in all the Semitic strata. These are flat, with a rounded top and concave sides. A hole runs vertically through the axis. They are about the same size as, and in some respect resemble, the quartzite mace-heads that are so common, and like them have no doubt an Egyptian origin.

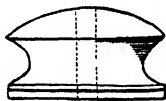


FIG 401—FURNITURE KNOB



FIG 402—UNFINISHED MACE-HEAD

### § 32.—THE WORKER IN STONE

Stone was the material of four different industries: those of the quarryman and mason, the flint-knapper, the fashioner of objects in rough stone, and the lapidary or worker in polished and precious stones. The labour of the first of these has already been described, as fully as the materials admit, in Chapter IV, and that of the second at the beginning of the present chapter. The products of the third and fourth more especially concern us in this section, although many of the rough stone objects have already been described in connexion with the purposes they were intended to serve—as hammer-heads, mortars, querns, and the like; and some of the polished stone objects—such as the seals and the weights—more properly belong to other sections. Objects in alabaster will be described with the other Egyptian remains, Egypt being apparently the provenance of most of the specimens found.

Nothing was found to illustrate the technical processes followed by workers in stone, except the lapidary's hoard described below, and such details as the use of the tubular drill, illustrated by an unfinished specimen

like the mace-head fig. 402. It is possible that some of the chisels described in the preceding section were stone-cutters' tools, but there is nothing to distinguish them as such. No little patience and skill is displayed in some cases by the way in which the hard, intractable material is treated: not merely are the essential details properly formed, but ornament, evidently imitating that of similar objects in pottery, is to be found successfully applied to various classes of objects.

The stones used for various purposes by the Gezerite lapidaries—using the word in the fullest and widest sense, to include all workers in stone except flint-knappers, quarrymen, and masons—were various. Diorite and similar hard igneous rocks are used for dishes, trays, mortars, pestles, querns, and braziers. They are of all degrees of roughness; the stone indeed seems to be selected specially with a view to this quality, according to the purpose it is intended to serve. Thus querns are, as a rule, made of rougher and more porous stones than are trays. For other purposes quartzite, basalt, and variously tinted marbles and serpentines are used, which take a high polish. For rough jar-stoppers, tablets for writing or drawing, and rude figures, the local limestone is employed, which in many of its beds is so soft that it can be scratched with the finger-nail. Objects in this material are always rude, and by contrast with the well-finished work of those in the harder stones they betray the hand of the amateur. For small objects such as weights and seals, and for personal adornments such as beads, pendants, etc., haematite, jasper, agate, chalcedony, carnelian, and a purple spar resembling amethyst are the commonest stones; there are a few others, notably an interesting little group in jade or jadeite. A minute fragment of green crystal, like an emerald, not worked in any way, was found on the rock near the Crematorium.

The following are the chief classes of stone objects not described elsewhere in this volume.

*Celts*, which exactly resemble the polished neolithic celts from other parts of the world, but continue in use down to the Third Semitic Period. A considerable number among the Gezer specimens have a conical depression in each side, probably a catch for wedges by which the implement was secured tightly in its haft. see Pl. cxcvi, fig. 1. Fig. 2 in the same plate is a large example (drawn to half the scale) in limestone, it can hardly have served any practical purpose as a cutting instrument. Fig. 3 is a small example in polished diorite: the perforation at the butt is not carried

through. It evidently was intended as an amulet. This is a late example, from **V 29**. A similar but still smaller celt-shaped amulet was found in jade; another, in crystal, is illustrated in fig. 289 (*ante*, p. 106), no. 11.

*Vessels* of various kinds. These apparently belong for the greater part to the earlier Semitic periods. The oldest form imitates exactly, in shape as in the shaded triangles scratched on the inside of the rim, the V-shaped bowls of the First Semitic cream-ware—First Semitic shapes (*k*). Indeed, bowls of this kind are often found associated with groups of cream-ware vessels. Fig. 402 *a* is a good example. In the Second and Third Semitic



FIG. 402 *a*.—STONE BOWL FOUND WITH "CREAM-WARE" VESSELS

Periods there is a greater variety, some representative specimens of which are represented in Plate cxcvi. Some of these vessels show marks of blackening with smoke, indicating that they were used in cooking. A good example of the way in which pottery models are followed is the saucer shown in Pl. cxcvi, fig. 19, which is a late specimen, having been found in **VI 19**. It is of limestone, 5" across, and it is evident that the drawing by itself, without explanation, might easily be taken to represent a pottery saucer. The diagram is a restoration, as only a small fragment of the original was found.

The majority of the vessels are dishes or trays. Some, like Pl. cxcvi, fig. 5 (III a 28), are mounted on a foot, but this is rare; the small ornamental polished diorite pot fig 18, which was found on the rock, is mounted on four small feet. Fig. 7, which is Fourth Semitic, has a hollow disc-base. Fig. 9, which is on a ring-base, is remarkable for its long button-handle, which we have already seen to be found in Third Semitic pottery. A more commonplace type is the cylindrical bowl, fig 11, a disc has been cut out from the middle of the bottom of this specimen. Square or rather rectangular vessels are commoner in stone than they are in pottery the shallow tray fig. 15, and the trough on four feet fig 13, are examples. The latter is drawn to a smaller scale than the other objects on the Plate the fragment measures 6" long  $\times$  4 $\frac{1}{2}$ " broad  $\times$  4" high. It is from IV 8. The clunch object fig 12 seems also to be part of a rectangular vessel. It measures 3"  $\times$  2 $\frac{1}{2}$ "  $\times$  2 $\frac{1}{2}$ ", and is likewise of the Third Semitic Period. Besides these forms, small rude cups, like the minute hand-modelled cups that in the pottery section met us in every period, are very common. On the other hand jugs or jars of stone were rare, no doubt owing to the difficulty of making them. Those found (as a rule in fragments only) were of highly polished ornamental stones and moderate in size, the interior hollow did not follow in outline the shape of the vessel, but was simply a cylindrical hole, as in the small specimen, Pl. cxcvi, fig. 18, already mentioned.

The ornamentation of stone vessels is illustrated by some specimens on the Plate. Especially common is the wavy line in relief, figs. 8, 10 (the perforated ear-handle on the former of these is a less frequent feature). Fig. 4 imitates a well-known type of pottery moulding, such rows of knobs are also common, though the form with flat lozenges in relief (fig. 6) is less usual than other types. A more elaborate form is illustrated by fig 13, with two animals' heads, human heads were found in one or two examples.

A special type of stone vessel, belonging properly to the First Semitic Period, but extending into the Second and perhaps the Third, is shewn in fig. 14. This is a V-shaped bowl, like that already described and illustrated, but with a deep, slightly conical foot, lightened by rectangular holes cut in the sides. This type must have been very common, to judge by the large number of fragments found: but the example figured was the only one nearly perfect that came to light. They must have been used with fire, as nearly all shewed traces of smoke. The example illustrated is not ornamented, but the majority of the fragments discovered shewed simple linear patterns, herringbone, basket-work, and the like, scratched upon their outer surface, and covering it wholly or partially.

*Sharpening and Polishing Stones.*—Stones of all shapes and sizes, with cuts and grooves across them, had evidently been used for sharpening metal tools. In the later strata a number of sandstones were found, which measured about 3 $\frac{1}{2}$ " long, 1" thick, and 2" in maximum breadth, the two broad faces were slightly hollowed by rubbing, and with the sides slightly concave so as to give a figure-of-8 shape to the stone. These stones had apparently been used for some grinding and polishing purpose. We have already

alluded to the polishing stones, about the shape of and a little larger than a piece of toilet soap, that were found in profusion in every stratum. Burnishing tools—more or less pointed bars of hard stone, the point blunted and worn smooth by wear—were also found, though less commonly.

*Maul-heads.*—Large stones, sometimes boulders about a foot in length, roughly cylindrical in shape, were not infrequently found with a groove cut round the middle. This probably was for tying a rope, in which case the most likely use of the stone was that of a heavy mallet-head. On the whole they seemed commonest in the later strata.

*Stone Rollers.*—In the Hellenistic stratum a very common object was a small roller of limestone, about  $2\frac{1}{2}$ " to 5" long, resembling a miniature copy of the large roof-rollers that have already been described (Vol. I, p. 190). A specimen is shown in Pl. cxcvi, fig. 20. The ends are

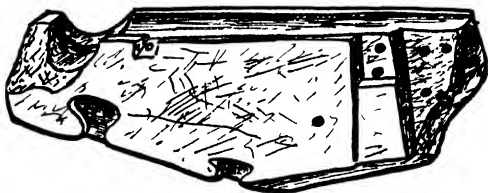


FIG. 403.—INDETERMINATE STONE FRAGMENT

either cut square or rounded, and they have a depression at each end, as though for a pivot on which the roller turned. They are always of soft stone: *never* found in earlier strata than the Hellenistic, and so common there that one or two specimens were found in the surface débris of almost every pit. Their use is obscure to me.

*Indeterminate Fragment.*—Fig. 403 represents a fragment of some stone object which I cannot identify. It is of a heavy, close-grained brown slate,  $6\frac{3}{4}$ " long and  $1\frac{3}{4}$ " high. The sides converge upwards, the top being  $1\frac{3}{4}$ " broad, the bottom  $2\frac{1}{2}$ ". The top bears a longitudinal groove, semicircular in section, and another crossing the first transversely and stopping at  $\frac{3}{8}$ " from the end of the stone. There are a number of holes and triangular square depressions in the sides, from which it would appear that the fragment was broken off in ancient times, and that an attempt had been made to

repair the object of which it had formed a part with fish-plates and dovetail rivets.

*Polished Pebbles.*—Numerous polished pebbles of haematite, jasper, agate, chalcedony, and quartzite were scattered through the excavation, as well as the beads, etc., of the same stones, which were so common.

Close to the group of Ramessid pottery objects found near the S. gate, but perhaps rather earlier, was found a hoard of pebbles about 70 in number, clearly the stock-in-trade of a dealer and worker in such stones. The chief of them are represented in fig. 404. They are all, with a few exceptions, of haematite. The following is a catalogue:—

Eight irregular pebbles on which no work had been done.

One similar pebble on which a flat face had been chipped, preparatory to polishing.

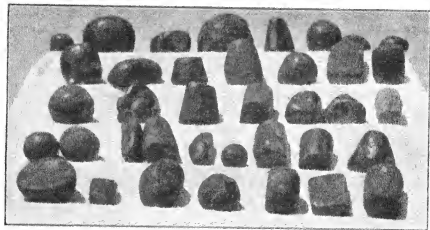


FIG. 404.—PART OF THE STOCK-IN-TRADE OF A LAPIDARY

Nine similar pebbles, with the flat face more or less polished. Little or no work done to the rest of the surface of the pebble.

Three pebbles with two such faces polished, the stone being given a wedge shape.

Five pebbles illustrating the formation of one of the common shuttle-shaped weights.

In one of these there are three principal planes polished, the stone being prismatic in shape: the back is then worked down gradually and the ends reduced. One example was apparently complete, and weighed 6·4 grammes.

Six pebbles—two of hornblende, and one each of jasper, diorite, agate, and haematite—illustrating the gradual formation of a parallelopiped. The diorite and agate, which were very handsome stones, had apparently received their final polish: they weighed respectively 9·4 and 21·82 grammes.

Nine pebbles in process of being brought to a cylindrical or conical shape by continuously polishing away angles until a curved surface is obtained. A few of these shew a small hole in the middle of the end surface, indicating the use of some kind of lathe. Five specimens apparently complete weighed respectively 26·09, 20·32, 16·32, 15·35, and 12·82 grammes.

One cylindrical pebble, one side polished smooth, weight 11.77 grammes

One conical pebble of basalt, base, top, and one side polished smooth, weight 23.59 grammes.

Five pebbles of hornblende two of them water-worn but not worked in any way, one apparently intended as a shuttle-shaped bead, which had broken while being worked, a fragment resembling the head of a polished celt; and a small polished pointed fragment.

Fourteen pebbles illustrating the formation of dome-shaped weights. A stone approximately spherical is selected and the base ground down the dome shape being obtained by a gradual process of smoothing off the angles between facets. The most complete of the series weighs 44.75 grammes the two smallest, which are also the smallest of the hoard, are likewise nearly finished, weighing respectively 3.64 and 2.31 grammes

In addition to weight-making, our lapidary also manufactured polished amulets of shell. Three pieces of shell, the raw material, were found in the hoard, and one small finished amulet, of which, however, the eye had broken after the drilling was finished.

*Tent-buttons.*—Some such purpose as this may be served by an object like Pl. cxcvi, fig. 16. They were not uncommon. An identical shape of button, but made of wood, is used in modern tents. These buttons as a rule belonged to the later periods, though not unknown as far back as the Second Semitic. A problematical object from VI 6 is shewn in Pl. cxcvi, fig. 17. It is a block of clunch, in shape like the rubbing-stones just mentioned, but with two grooves surrounding it, crossing at right angles. There are several ways in which such a stone might be utilised, but nothing to shew what was its true use.

### § 33.—THE WORKER IN METAL

The metals which the Gezerites used were gold, silver, lead, bronze, and iron.

The small quantity of the *gold* found has already been commented upon and explained. But the trade of the goldsmith was in any case never very active in Gezer. The absence of the metal can be explained by the frequent lootings to which the city was subjected: but the rarity of goldsmiths' crucibles and moulds can only be due to the minor importance of the trade in the city.

The gold, wherever obtained, reached the artificer in the form of ingots, two of which were found at the north end of trench 19, in débris of about



the beginning of the Fourth Semitic Period. They were of very pure gold, as analysis of a minute paring from them shewed; and they had been beaten into shape (fig. 405). Casts, gilt to represent the originals, are exhibited in the museum of the Palestine Exploration Fund. One of these was a circular disc,  $2\frac{1}{2}$ " in diameter and  $\frac{5}{8}$ " thick: the other was a bar  $10\frac{1}{8}$ " long,  $\frac{3}{8}$ " thick,  $1\frac{1}{8}$ " broad at one end and  $\frac{7}{8}$ " at the other, but rather narrower in the middle and slightly curved. I had not a sufficient set of weights in the camp to weigh accurately these ingots, and thought it undesirable to provoke gossip by having them weighed by any one else.

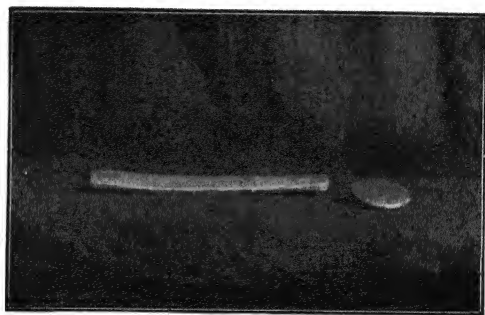


FIG. 405.—GOLD INGOTS

Balanced against a number of makeshifts, the weight of which was afterwards ascertained, they amounted respectively to 11·2 oz. and 27·6 oz., but these cannot be put forward as more than rough approximations. The tongue-like shape of the second ingot recalls the לשון or "tongue" of gold ["wedge" in the English version] which Achan stole from the spoils of Jericho; the coincidence suggests that this was the usual form of ingots of trade gold. The bars of silver found by Schliemann in the great treasure of Hissarlik may also be compared.\*

\* It is worth passing notice that 27·6 oz. is 13,248 grains, and "fifty shekels," the weight of Achan's "wedge," is (on the Babylonian heavy gold standard of 260 grains to the shekel) 13,000 grains. If this be not a mere coincidence it indicates that the ingots were made up for trade into definite sizes which would of course make them serviceable as currency for large payments.

From the beginning of the Semitic Periods the technical properties of gold, with all the ornamental possibilities which they involved, were well understood. It could be beaten out into leaf, which could be ornamented in repoussé; it could be cast and hammered into any shape required; could be drawn out as wire; and could be used for the ornamentation of other materials. Specimens of all these different ways of treating the metal were found in the excavation.

Of the first process—beating into leaf and ornamenting with repoussé devices—a good example is the armlet from cave 28 II (Pl. xxxi, fig 1). The small fastening upon it, so like the eye of a modern hook-and-eye, is an illustration of the use of gold as wire, and of the knowledge of burning or welding two pieces of gold together. for it is by this method the "eye" is secured to its place, whereas the corresponding "hook" at the other end, which was fastened with rivets, is lost. The beads on the same Plate, figs 20, 23, are likewise made of gold leaf, ornamented, and then turned over and fastened in a similar way. In IV 19 were found a number of torn and crushed



FIG. 406.—FRAGMENTS OF GOLD LEAF

fragments of gold leaf, ornamented in some cases with delicate linear and spiral patterns in repoussé (fig 406). These had evidently decorated some object of wood or other perishable material, which had decayed away to nothing.

When gold was cast it was melted in a crucible of stone or porcelain, such as is shown in Pl. cxxxvi, figs. 19, 20, both of which come from the Fourth Semitic stratum. When melted it was run into moulds of some hard compact stone of close-grained texture, capable of taking the necessarily delicate cutting. Pl. cxxxvi, figs. 21, 22 are specimens of these moulds. The first of these, from III 10, seems to be for casting a pair of earrings resembling fig 6a on the same Plate, the type of which we have already described, and also for casting scarabs, though no metal scarab was found in the excavation. The fragment fig 22 is too small to determine the object it was intended to make. Fig 407 represents an interesting mould found in late Third Semitic debris. The objects that would be produced are added to the figure, from which it appears that they are unlike anything actually found in the excavation. This in itself shows how imperfect must be the harvest from a frequently plundered city, as the presence of the mould is sufficient indication that the objects were multiplied in the city. The groove through *d* is evidently for receiving a pin that would make a perforation in the stem for suspension. The object resembling a battle-axe in shape (*f*) is curious. The stone measures  $2\frac{3}{4}$ " by  $1\frac{7}{8}$ " by  $\frac{1}{2}$ ".

In opposite corners will be seen the mortices for receiving tenons in the corresponding mould, thereby making sure that the two halves of the mould were properly fitted to one another. The opposite half was not forthcoming.

It is possible that the bronze object Pl. cxcvii, fig. 27, from Fourth Semitic debris, was a goldsmith's hammer. The metal of which it was made was badly cast and much flawed, so that it would not stand heavy usage.

A few words may be said about the gold objects figured on Plate cxxxvi, which have not been already described in the description of personal adornment. Fig. 10 [V 28] is a flower of five petals, in gold, apparently intended for sewing on to a garment. There are four small holes for the thread. Fig. 11 [III 27] is a disc with a number of dots in repoussé, three of them, in one line, being larger than the others. With it was found fig. 12, a pendant similar in style to that figured above (p. 94, fig. 283), but made of bronze. Fig. 13, from the Third Semitic stratum, seems to be the head of a hawk, modelled in thick gold-leaf. Fig. 14 [III a 30] is one of the common plano-

convex bone buttons, with gold-leaf wrapped round it, part of which was torn away. (It is not secured to the bone in any way, so cannot be strictly described as *gilding*.) This must have been an afterthought, as the gold covers the hole drilled through the button. Figs. 15, 16, and 17 are three earrings, illustrating different technical processes: the first is drawn gold wire, the second a thin gold tube decorated with ridges, and the third is a delicate plait of very thin gold wire. Fig. 18 [II 2] is a lamina of gold with

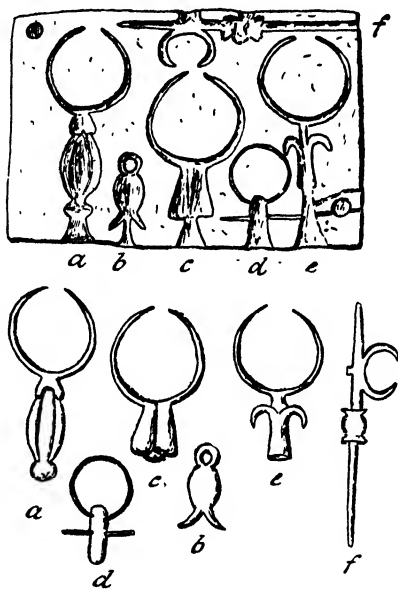


FIG 407—MOULD FOR CASTING ORNAMENTS

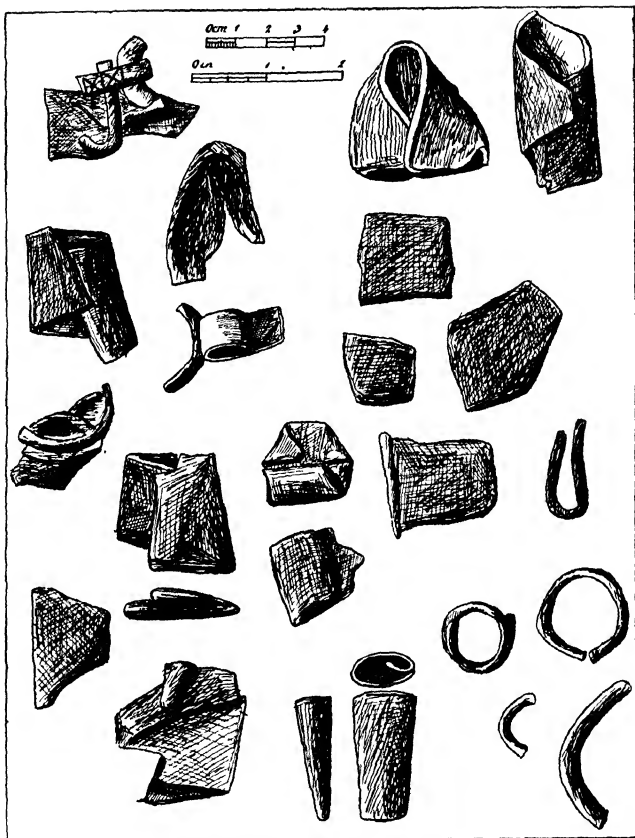


FIG. 408.—A SILVERSMITH'S HOARD

a herringbone ornament in repoussé upon it, which was found wrapped round a minute fragment of bronze wire. A minute gold annulet, perhaps the ring of a chain,  $1\frac{3}{8}$ " across and 1" in axial length, was found close to the surface

near the third tower from the east on the north side of the outer city wall In **II 20** was found a fragment of a string of beads, some gold and some carnelian, strung on a silver wire

The remains in silver were of much less interest than those of gold, owing to their extreme monotony The hairpins with eye cast on the shank, plain earrings and bracelets, which have already been sufficiently described, with the pendant crescents which properly belong to the section on Amulets, occupy the great bulk of the products of the silversmith. Pl. cxxxvi, fig 8 is a collection of objects—a pin of uncommon shape, a crescent pendant, and a dress-fastening (?) of some kind, all rusted together Fig 9 is one of the most interesting silver objects found: it came to light in **VI 29** It seems to have been meant to be attached for decoration to a box or some such

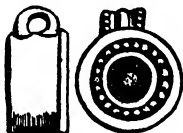


FIG 409.—SILVER AMULET

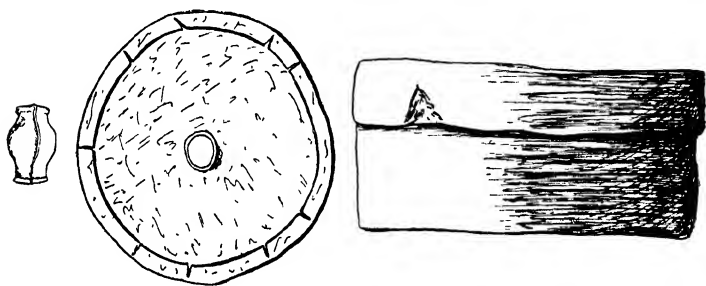
article of furniture. It is a disc, measuring  $1\frac{1}{4}'' \times 1''$ , with half of a female figure, having a veil over the head, in repoussé upon it. A row of knobs surrounds the margin.\* The two silver vases from the Philistine grave no. 4 (Vol. I, p. 295) and the bowl from no. 5 (*ib.* p. 296) are the *chefs d'œuvre* of Gezer silver-ware, but there can be little doubt that these were not of local manufacture.

The series of shapeless fragments of silver, fig 408, were found with a number of others in a jar They evidently are waste scraps collected for re-melting by a silversmith. The small object fig. 409 was found in **II 16** It is circular,  $\frac{3}{4}''$  in diameter, and resembles a pill-box with a loop attached to the side. The middle of the top is enamelled deep blue, with a white spot in the middle. round the enamel runs a ring of small knobs This is the only example found in Gezer of the use of enamel on silver The box when found was filled with a white earth quite different from that in which the object was embedded.

*Lead* is not very much used, and principally in the Hellenistic Period. As has already been mentioned, it appears sometimes in the Byzantine

\* The large circle in the lower left-hand corner is the head of a bronze pin

tombs, apparently as a cheap substitute for the more precious metals. The small kohl-pot fig 410 ( $1\frac{1}{8}$ " high) and the perforated circular disc fig 411 ( $4\frac{1}{4}$ " in diameter) came from this stratum, as did the covered cylindrical cup fig. 412, which was found in the cistern at the north end V 28.\* It contained a cockle-shell. Some fragments of lead plates with nail-holes on them, measuring about  $3" \times 1"$ , may perhaps be worth passing mention; they had evidently been secured on to some wooden (?) object. Perhaps the oldest example of the use of lead was a minute ring open at the ends, about  $\frac{1}{2}"$  in diameter, from the Third Semitic stratum. The description of the leaden weights belongs to a later section.



FIGS 410-412 — LEADEN OBJECTS

Bronze is the dominant metal throughout the history of the city. The alloy seems to have been almost always used throughout, in preference to pure copper, though without analysis of each specimen it would be impossible to be certain of its composition.

Desiring to find whether there was any difference in the alloy in different periods, I submitted four specimens of bronze pins, broken and worthless archaeologically, for analysis to Mr J. E. Purvis, of the Cambridge University Laboratory. They proved, however, to be not very well selected for the purpose, for, as Mr Purvis reports, they were much corroded, and there appeared to have been a very large amount of carbonisation in the case of I, III, and IV. "Chemical changes had gone on to a very large extent in all the specimens, and in consequence

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\* This cistern also contained Hellenistic objects, and the vessel is most probably to be assigned to this later period.

there would be a transference and an oxidation, and possibly a solution of part of the constituents, so that the original proportionate constituents of the alloy are absent; the relative amounts of the copper and tin would be so altered as to differ completely from the original alloy." The subject is therefore still open to future investigation. Mr. Purvis's analyses are as follows

	I (First Semitic)	II (end of Second Semitic)	III (Third Semitic)	IV (beginning of Fourth Semitic).
Copper . . .	77.90	63.5	66.40	90.00
Zinc . . . .	2.89	3.7	23.40	1.86
Tin . . . . .	11.20	33.7	10.17	7.73
	91.99	100.9	99.97	99.59



FIG. 413.—POTTERY TUYÈRE

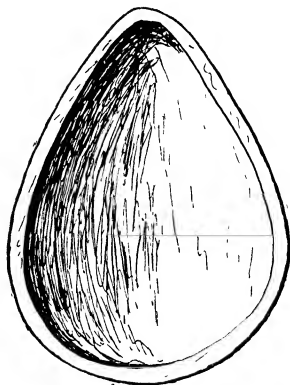


FIG. 414.—SAUCER FOR BRONZE CASTING

For smelting the metal a blast was used, transferred to the furnace from a bellows by a *tuyère* of very coarse pottery. Specimens of such tubes were common throughout the Semitic strata. They were either curved, as in the example figured (fig. 413), or straight, in which latter case the small lower orifice was at the side of the tube. The bronze alloy was melted in coarse earthenware vessels, fragments of which, with waste bronze adhering to the inner surface of the base, were fairly common. When molten it was transferred by means of rude spouted saucers like

fig 414 [V 29], which measures  $5\frac{1}{2}$ " long and 3" deep, and run into stone (occasionally earthenware) moulds, which had previously been smeared with lampblack or some such black greasy substance to prevent adhesion.

Specimens of moulds were fairly common in every stratum; the majority were for casting spears, swords, daggers, axes, arrow-heads, and

the like. A smaller number were meant for pins. These were all of such commonplace type that it is unnecessary to give more than one specimen illustration (fig. 415): a four-sided block bearing upon it the matrices of a dagger, a chisel, and two axe-heads—one of them with side loops such as were not found on any actual specimen unearthed in the city. This specimen was found in IV 3. The others found range through all periods, and there is no special chronological development to be traced in them. It was very common to have several different matrices on the one stone, as in this example, though perhaps a single mould was more frequent. Another disposition was shewn by an imperfect mould for casting axe-heads, found in the Hellenistic stratum, this seems to have been

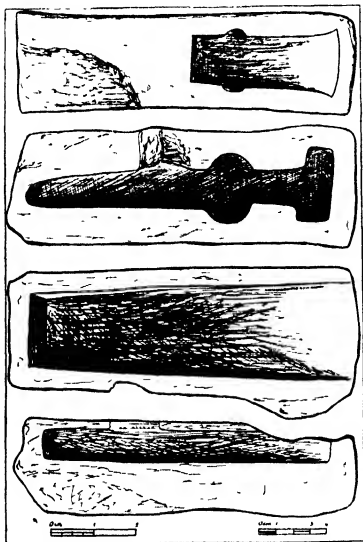


FIG. 415—STONE MOULD FOR BRONZE CASTING

a round table in shape, supported on feet, with the matrices sunk in the upper surface.

The objects found in bronze are for the greater part described elsewhere in this volume under their proper headings—vessels, ornaments, tools, weapons, etc. A few miscellaneous objects which cannot be so easily classified, principally because it is difficult to be certain as to their exact purpose, are collected on Plate cxvii. Fig. 1 is a rivet, of which a number were found here and there. They were used for a variety of purposes, principally (so far as the remains indicated) for securing the hafts and the blades of knives together. Fig. 2 is a strap of some kind, possibly



part of the hinge of a box. It was found in the Great Central Reservoir, and so is of Hellenistic date. Fig. 3 [VI 29] is a curious object which I cannot explain. It may be part of the latch of a door. Fig. 4 is a narrow, flat strip of bronze twisted into a screw shape, from IV 16. Fig. 5 [VI 28] looks like an ornamental ferule for some small rod, it has had a socket, but the two sides have been crushed, so that when found the object was quite flat. Fig. 6, from late in the Third Semitic stratum, is a triple hook, with a tenon for mounting in a handle. It may possibly be a teasing or carding instrument. Fig. 7, a boot-shaped instrument, with a perforated hexagonal head, from late in V 16, is perhaps some kind of key. Fig. 8 is a specimen of the numerous fastenings of one kind or another which were discovered all through the mound, and which have very little meaning for us in the absence of the objects to which they belonged. Much the same is true of the plate with rivet-holes, fig. 9, which was found in waste earth. Many such plates were found in the course of the excavations. Fig. 10 [V 29a] is a loop on which a pendent bead has been mounted, in the manner already described. Fig. 11, from the Hellenistic stratum—in its present form two round discs of bronze with four small bars holding them apart—is probably the surviving portion of some object of leather with bronze ornamentation. Fig. 12, also from the Hellenistic stratum, consists of two twists of bronze, the one thrust through a loop in the other. I cannot explain fig. 13 (IV 29), nor the meaningless-looking object fig. 14, from the same trench and stratum, nor yet the flat, perforated, triangular disc fig. 15, which belongs to the Second Semitic Period. The massive hook fig. 16, found on the rock, reminds one of the wooden hooks with which ropes tying camel-burdens are secured in modern Palestine. Fig. 17 is a small lamina of bronze, slightly hollowed, as though to make a saucer. A fragment of pumice stone was adhering to it when found. It came from the Hellenistic stratum. It would be difficult to assign a use to the double concave oval object fig. 18 [III 8], or the bifid tool fig. 19 [II 28], one or two others like this were found, all in the First Semitic stratum. Fig. 20, which was found in waste earth, is another of those bronze garnishings which are meaningless without the object to which they belonged, fig. 21, with holes for threading, is one of a pair found in V 12. They are possibly parts of the ornamentation of a garment. The two discs were precisely similar; when found one was inside the other. Fig. 22 is a stopper of a bronze vessel, found in a cistern in VI 29. The rest of the vessel was not forthcoming. Fig. 23 is apparently a head for a square-shanked pin, from the Hellenistic stratum. Figs. 24–26 are specimens of the handles of bronze vessels. The first two of these are of the bucket-handle shape, with the loops in the first turned in, and in the second turned out. There were several such bucket-handles found, nearly all of small size, and nearly all in the Hellenistic stratum. The largest found resembled fig. 25, and was  $6\frac{3}{4}$ " from tip to tip of the hooks. It was found in IV 13. Fig. 26 is a loop-handle of an ornamental bronze vessel, of which, however, no other fragment was discovered. It belonged to the Hellenistic stratum. Fig. 27, as has already been suggested, may have been a goldsmith's hammer. The remaining objects on the Plate were of iron.

The variety of purposes for which *knives* can be used makes it advisable

to describe them here rather than in one of the specific sections where the tools are commented upon. A representative series of bronze knives will be found illustrated in Plate cxcviii. Fig. 1 [III 30] is of a very characteristic Second Semitic shape; there was probably a rivet-hole in the butt-end of the blade, which is broken off. The backward curve of the blunt edge of the blade is not so abrupt as it sometimes is. see for example the otherwise similar knife from the Second Semitic tomb no. 1 (Pl. lx, fig. 1). Fig. 2 is also Second Semitic, and though different in detail is essentially similar in type. This specimen, which was found deep under the ramp leading to the Maccabaeon city gates, retains its rivet-holes at the lower end. Fig. 3, from IV 29, is rather different, the edge being concave and the butt containing the rivets wider than the rest of the blade. Figs. 4-11 shew specimens of the tanged knife, which may also in some cases be a spear-head: it is often difficult to decide. They range from the First or Second Semitic Period to the Fourth. Fig. 5, however, cannot be anything but a knife; the hook in the end of the tang is obviously meant to hold the haft in position, and therefore determines the length of the handle. Compare the bifurcated handle Pl. lxiii, fig. 52. Fig. 11 still retains a portion of the bone haft. The tang as a rule ends square, as in fig. 6, or in a flat, triangular point, as fig. 8; a chisel-point, like figs. 9, 10, is perhaps slightly less common. These points are of no chronological importance. A small toilet knife (? a razor), that probably could slip out of the sheath now firmly gripping it through corrosion, is shown in fig. 5a, it belongs to the Second Semitic stratum. Figs. 12, 13, and 15 are tanged knives, in which the tang is a continuation of the back of the blade (there is a slight shoulder in fig. 15). Fig. 16 is similar, and retains its ivory handle. This shape of handle, ending in a round perforated disc, was very general in the Fourth Semitic Period, to which the majority of this kind of knife belong. Fig. 14, with a double tang, is a rare form—indeed I do not think another example was found; it came from III 8. Figs. 17, 19 are two flat knives with tangs curled over so as to form a loop for the finger; the first of these was found in VI 15, the second was picked up on the surface of the ground before the work began. Fig. 18 is a tangless blade, which is also a rare type; it came from IV 2.

Mention should also be made of a pulley of bronze found in IV 29, and illustrated in fig. 416. Its spindle revolved on two pivots which rotated in bronze hands at the end of an arm bent into three sides of a square.

To the side opposite the spindle are attached two loops. A few lamps of bronze were found in the Hellenistic stratum; the best is that from tomb no. 118 (Pl. xcix, fig. 1).

*Iron*—of course wrought iron only—does not come into use till about 1000 B.C., that is to say about the beginning of the Fourth Semitic Period. From that onward, though the majority of the specimens found were rusted almost beyond recognition, they were fairly frequent, and we cannot believe that if the metal were used before this date it would have so totally disappeared. The introduction of iron is possibly the main contribution of the Philistines to the civilisation of Palestine. The curious passage

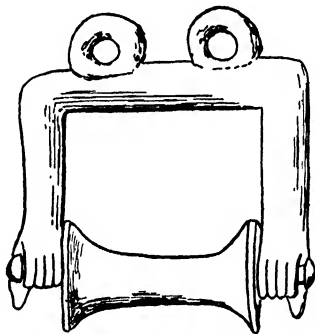


FIG. 416.—BRONZE PULLEY

1 Sam. xiii 19–22 may be a distorted recollection of the overlap of metals in the time of Saul, the coast-dwelling and comparatively civilised Philistines having already entered the iron age, while the less cultured Hebrews and other inland tribes still lingered in the age of bronze.

A curious exception to the total absence of iron in the earlier Semitic periods must, however, be mentioned. At the very bottom of the sloping part of the Water-passage were found two wedge-shaped lumps of iron, apparently parts of axe-blades or hoes (fig. 417). How these had got down to their resting-place, which was sealed up some four or five hundred years before the use of iron became general, is not easily explained. But we need not hesitate to admit the possibility of stray pieces of iron finding their way to Gezer even before the date when the iron age may be said to begin. It is known that certain sporadic instances of the use of iron, dating even as far back as the fourth dynasty, have come to light in Egypt, and in a city that

had so close a connexion with Egypt there is not much difficulty in imagining a settler from that country bringing iron blades with him, which, we can well suppose, would be his most precious possession. He had the ill-luck to lose them in the soft silt with which at the time the Water-passage was being filled up, they fell down far out of his reach, and found a resting-place at the bottom of the staircase, where they were discovered. It is very striking that the solitary specimens of iron dating anterior to 1000 B.C. should have thus been grouped together.

Although iron, once it was introduced into general use, rapidly ousted bronze for tools that were intended to stand wear and tear, it never

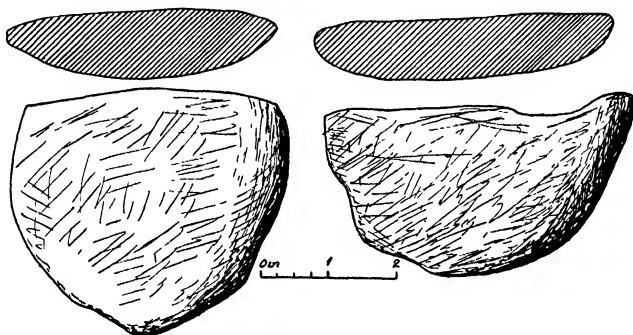


FIG. 417—IRON AXE-HEADS FROM THE WATER-PASSAGE

succeeded in displacing bronze for small objects. The smiths were apparently unable to do anything but coarse work. Large clumsy nails are made of iron, but the small nails are made of bronze to the end. This fact is most conspicuously illustrated by hafted iron knives, in which the rivets securing the hafting-plates continue to be made almost always of bronze.

Some miscellaneous objects in iron will be found in Pl cxcvii, figs. 28 onward. (The other iron objects are described in the places to which they belong—agricultural instruments, ornaments, tools, weapons, etc.) Fig 28 is part of a strap with nail-holes, evidently a fragment of the fastening of a box or some such object. Fig. 29 is a small looped nail or holdfast. Figs 30, 32, 33, and 40 are rings of iron, probably meant to secure the parts of some wooden object together: as has already been said with regard to some of the bronze fragments on this plate, many of the iron objects are meaningless apart from their original context. Fig. 31 [V 8] is a bent object the head of which resembles that of fig 13. I cannot say what may have

been its use. The length between the ends of the curve is  $2\frac{3}{4}$ ". Fig. 34 is a four-sided bar of iron, expanding in the middle and flattening at the ends, possibly part of some kind of brooch. Figs. 35, 36, 37, 38, and the flat oval disc fig. 39, are all equally problematical: a glance at the Plate will give a sufficient idea of their appearance. Fig. 41 is half of a pair of tongs, in shape like a gigantic tweezers. Such tongs are still used in the country for manipulating hot charcoal ashes. All these objects were from the Hellenistic stratum, except figs. 31, 37, and 40, which were Fourth Semitic.

An iron key is shewn in Vol I, p. 187, fig. 75, and in accordance with the promise there made another is here shewn with four pins to open a lock with corresponding tumblers (fig. 418). Others were found with two or three, variously disposed. These all belonged to the Hellenistic stratum, without exception.

As a freak may be mentioned a lamp, found in the Fourth Semitic stratum, of the ordinary shape of lamps of that period, but made of iron instead of pottery.



FIG. 418—IRON KEY

The iron *knives* are shewn in Plate xcix. It will be seen that in the majority the back of the tang is in the same straight line as the back of the blade. In figs. 1 and 2 (Fourth Semitic) the hafting-plates still remain. Fig. 3 is Fourth Semitic. Fig. 4 is early in the Fourth Semitic Period (from V 28), and the rivets are of bronze. In fig. 5 it will be noticed that the rivets are not, as usual, arranged in a straight line, but in a triangle. Fig. 6, which was found in fragments in the central reservoir, is peculiar for the shoulder between the back of the tang and the back of the blade, and the absence of rivet-holes. In fig. 7, from VI 29 (which may represent a small sickle rather than a knife), the tang is looped to fit on the finger, as in the similar bronze knives. Fig. 8, from outside the city wall, is peculiar. I could not satisfactorily determine whether the bend in the tang was intentional or not: it probably was not, as there is no use conceivable for the scythe-mounting of so small a knife. Fig. 9 is one of two curved socketed knives found in VI 8: the edge in each was on the concave side. Figs. 10 and 11 are two small cutting-out knives—the first of them socketed, the other with a knob at the end of the tang. Figs. 12, 13 have very long

tangs, the one without rivets, the other with. Fig. 14 shows another unusual disposition of the rivets, in an oblique line crossing the butt of the blade.

### § 34.—THE PAINTER AND THE SCRIBE

Of the work of the *painter* nothing survived but the decoration of coloured pottery and the small fragment of coloured wall decoration described in Vol. I, p. 181. Specimens of some of his appliances were, however, discovered in sufficient numbers to show that paint was much used in the city.

We may presume that vegetable colours were used, but nothing of these

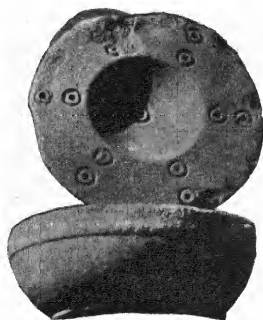


FIG. 419.—STONE SAUCERS, PROBABLY PALETTES

remained recognisable. The only colours that could survive the corrosion of time were the ochreous clays and other mineral pigments, of which a large number of cakes, red, yellow, blue, and green, came to light. Various hues of red were the commonest: green was perhaps the least frequent. A cake of red colour submitted for analysis to Mr. Purvis was pronounced to be nothing but oxide of iron ( $\text{Fe}_2\text{O}_3$ ): a cake of yellow proved to be "what is usually known as limonite, its composition being most probably  $2\text{Fe}_2\text{O}_3 \cdot 3\text{H}_2\text{O}$ —the lighter colour being caused by the water of hydration."

These colours were usually in irregular cakes, but in one case already described there was a small quantity of green powder sewn up in a small cloth bag. The colours were ground on palettes of smooth stone, of which

specimens were found in all strata. A small flat oval stone, daubed with red paint, was discovered in cave 18 I. These palettes were of various shapes, square, trapezoidal, triangular, or rhomboid. they were of moderate size—thus, one from the Second Semitic stratum was triangular, with base 3" long and sides  $2\frac{1}{2}$ "; another, from the Fourth Semitic, was a rhombus, the two diagonals being respectively  $3\frac{3}{4}$ " and  $2\frac{1}{4}$ " in length, a third, from the Hellenistic stratum, was  $4\frac{3}{8}$ " square. The thickness was about  $\frac{3}{8}$ " or  $\frac{1}{2}$ ". There was no ornament to speak of upon them. The triangular example just mentioned had the edges on one side bevelled. The square Hellenistic example had a bronze nail in each corner, flush on one face and projecting slightly on the other: there was also a small hole midway between two of the nails on one side, apparently for suspension. Otherwise the palettes were quite plain.

There was however a more elaborate kind of palette which was very common in the city: there were specimens found in every trench, especially, if not exclusively, in the Fourth Semitic Period. These were of a smooth, compact, whitish stone, such as quartzite or alabaster, shaped like saucers, about 3" in diameter, with a depression in the upper surface. The sides are slightly moulded, and the base is flat. Surrounding the depression is a simple geometrical ornament, scratched, punched, or traced with a compass. Fig. 419 shews typical specimens, and others will be found in Pl. ccxiii, figs. 1-8, which shews the most frequent and typical forms of ornament. It is rare to find them perfectly plain, like fig. 1. On the other hand, the long button-handle, surrounding nearly half the object, is common. A few, like the example shewn in Pl. lxxvi, fig. 19, have the ornament filled in with colour. Some traces of rebellious hairs on the edges of painted ornament in pottery shewed that brushes were used, but of course we could not expect to find them.

I share fully the regret which everyone must feel that the work of the *scribe* calls for very brief description. We may feel sure that there were plenty of written documents in the city at any period after, perhaps, the First Semitic. But of course those on papyrus, waxed tablets, and other perishable materials would long since been disappeared by the natural processes of decay: and no unbaked tablets or ostraka came to light, although the possibility of such being found was never lost sight of. On the other hand it may fairly be pleaded that the valuable archaeological and anthropological material which the Gezerites left us to some extent atones for

the absence of written documents, and further, that the value of the latter can be much exaggerated. Letters, or even historical stelae, depend on the trustworthiness of their unknown writers: and perhaps more often than not they raise more problems than they solve. The Great Unknown who designed and carried out the labour of the Water-passage of Gezer left a more eloquent and convincing testimony of his importance in his handiwork than if he had given us a stele with an inflated account of his triumphs over his neighbours.

The implements of the scribe which have survived are the styli, for writing on wax and clay, and the written documents themselves. The styli, representative

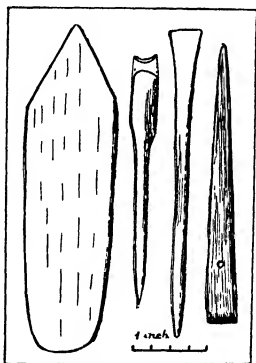


FIG. 420—STYLI

specimens of which are shewn in fig 420, are round or flat slips of bone or ivory with a sharpened point at one end and a rounded or straight butt at the other for writing and for erasure respectively. No 1 represents the commonest form. It was found in all strata, from the Second Semitic onwards. The usual length is about  $3\frac{1}{2}$ "–4 $\frac{1}{2}$ " but two were found in the Hellenistic stratum, one of them only  $2\frac{1}{2}$ " long, the other just 12" in length. The latter is quite exceptional. Of the others represented in the figure, no 2 was found in the rock—the curved butt is not very common, and perhaps this may be a pricker or pin rather than a stylus. No 3, a very neatly made specimen, is of ivory, from the Third Semitic stratum. No 4 has a hole for suspension.

As might be expected in a city so much subjected to foreign influence,



there was a great variety of scripts used in the city, each with its own special technique, as the following list will shew :

*Babylonian*.—The letters of Yapaḥi, found at Tell el-Amarna.

*Egyptian*.—The scarabs, stelae, etc., described below (§ 37).

*Cretan and Hittite*.—No trace of either of these scripts was found.

*Neo-Babylonian*.—A letter (see Vol. I, p 30)

*Assyrian*.—Two tablets discussed Vol. I, p 22 *et seqq.*

*Old Hebrew*.—We may presume this to have been the most frequently used script



FIG 421—INSCRIBED FRAGMENT OF BONE

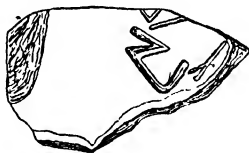


FIG. 422—INSCRIBED FLINT SCRAPER

in the Fourth Semitic and Persian Periods, but probably for the greater part the writings in which it was employed were on perishable materials. The most important specimen that has survived is the calendar-tablet, discussed above, p 24 Except this, the only examples are fig 421—the letter } scratched on a piece of bone 1½" long (IV 4], the ✕ scratched on a flint (Pl cxxxix, fig 16), some inscriptions on weights (see § 35), and potters' stamps (see above, p 209) One ossuary inscription (Vol. I, p 384, fig. 199) illustrates the transition from the Old Hebrew to the square Hebrew



FIG 423—INSCRIPTION ON A WEIGHT

It is difficult to know what to make of the fragment of a flint scraper fig 422, which was found in IV 29, in an early context—not later than the very beginning of the Third Semitic Period The marks scratched on the calcareous surface have been carefully drawn with the aid of a camera lucida Without the missing part of the implement it is not possible to say what this design may have been, and whether the extraordinary resemblance of the principal member surviving to an Old Hebrew *nln*, *reversed*, be a mere coincidence. This, however, is the most likely otherwise the reversal of the character and the early date of the object itself would both be very extraordinary.

*Cypriote*.—Prof. Sayce would explain the character ⚡, found on certain weights,

described in § 35, as the Cypriote character *ro*. I confess myself doubtful of this identification in any case. No other trace of Cypriote script was found. This character is associated with peculiar numerical symbols, easily interpreted by the proportions of the amounts of the weights, which are given below in the proper



FIG 424—INSCRIBED STONE

place. I denotes *one*, II *two*, L *four*, and J *eight*. The last two characters are carelessly cut, and both approximate to V and L, as in fig 423, and in an example from Jerusalem but comparisons of all the examples leave no doubt that the forms above given

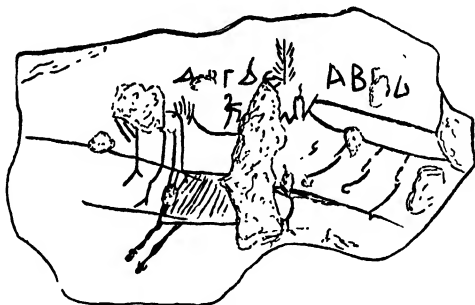


FIG 425—INSCRIBED STONE

represent the true intention of the engravers. I know of no other instance of this numerical system.

*Greek*—The Greek inscriptions found include potters' stamps on Rhodian and other wine-jars (see § 40), the name of Alkios on the boundary stones; some graffiti, scratched on soft limestone—the *Antiochus* tablet (Vol. I, p. 35), three stones found

in the Maccabaeen Castle (Vol I, pp 211-213), a circular disc  $3\frac{1}{2}$ " in diameter with  $\text{I}\Phi\text{N}\Lambda$  scratched on it (fig 424), another block with the first few letters of the alphabet (fig. 425), the inscription of Lysimachus and the altar of Eunelos, described in § 46; the Sosipatros weight, some mottoes on lamps (*ante*, p 228); and a fragment of a Byzantine tomb-inscription (Vol I, p 42 see also *post*, § 47).

*Square Hebrew*—The only square Hebrew inscriptions found were the boundary stones (Vol. I, p. 37), some names scratched on ossuaries (Vol I, pp 347, 349, 384) and the first five letters of the alphabet in fig. 425. This stone, the upper surface of which measures  $6\frac{1}{2}$ " by 5", has a curious collection of scribbles upon it: two rudely drawn animals, the Greek uncial letters  $\Delta\text{B}\Gamma\Delta\text{E}$  followed by a palm leaf, after which come the capital letters  $\text{A}\text{B}\Gamma\Delta$ . Beneath the first of these letter-rows had evidently been written the characters  $\text{אבגדה}$ , but the three middle letters were lost by a fracture. I do not understand the figure like a 2 above the  $\eta$ .

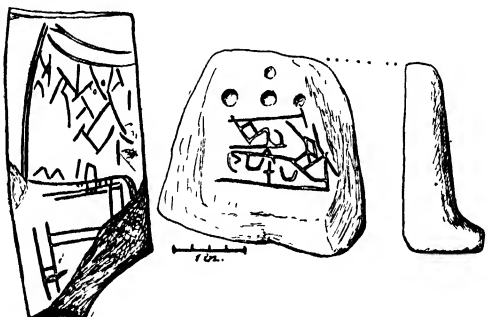


FIG 426—INSCRIBED STONES

*Latin*—Two potters' names on lamps (Vol I, pp 346, 347).

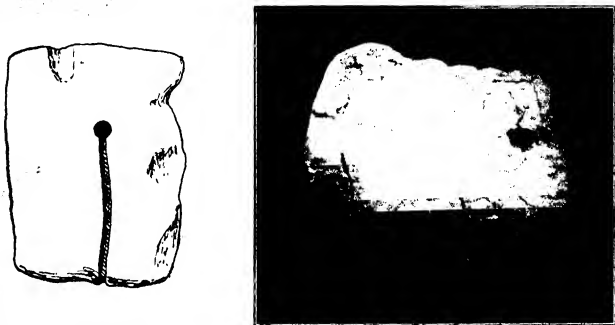
*Arabic*—The inscription on the Muslim *wely* (Vol I, p. 43).

*Meaningless Inscriptions*—Fig. 426 shews two fragments of clunch on which marks resembling letters have been scratched, probably by some illiterate person who had a certain amount of imitative talent. These were both found in the Hellenistic stratum. Here and there similar fragments were found with random scratches upon them, but not nearly so definite even as the examples cited.

*Blank Tablets*—In IV 29 were found about half a dozen pieces of clay, resembling tablets for cuneiform writing, but uninscribed. A similar hoard was found in the Jericho excavation, about the same time. These cannot, however, have been prepared for writing, as they were hard-baked, and would not soften in water or otherwise, most likely, whatever may have

been their purpose, it had nothing to do with the work of the scribe. The same cannot, however, be said of the tantalising tablet fig. 427, found in the late context VI 9. It is evidently the outside of a series that had all been bound together with a string (having nine strands to the centimetre), which has made an impression on the one side of the tablet. The other side, being turned in towards the leaf of which the tablet found was a guard, has of course no impression. The tablet measures  $2\frac{3}{8}'' \times 2'' \times \frac{5}{8}''$ .

Another late example of the use of clay is shewn in fig. 428 [VI 12].



FIGS. 427, 428.—CLAY TABLETS

This is an unbaked tablet  $2\frac{3}{8}'' \times 2\frac{1}{4}''$ , much flawed and cracked, having a series of marks, of which I could make nothing, along one edge.

### § 35.—THE INSTRUMENTS OF TRADE

#### (Weights, Seals, Coins)

*Weights.*—At the outset of any attempt to study the weights in use in Gezer we are confronted by the difficulty of determining whether certain objects are really weights or are to be explained otherwise. For instance, there are to be found, in almost every stratum of every pit, small conical stones, on a slightly convex base, that look like weights, and are almost too small to be used as pestles. These, however, are most probably grinders, for paint or other purposes. It must be said that some of these have a

hollow drilled in the base, penetrating about  $\frac{3}{8}$ " into it—in one or two cases there were two such hollows—and it would not be unnatural to imagine that these were meant to adapt the stone as a weight, reducing it to the standard or multiple of the standard required; but this is so uncertain that to enumerate the weights of such stones would very likely be misleading. Only stones about whose purpose as weights there can be no doubt are catalogued here.

Though weights and measures must have been used from the earliest times, we need not be surprised to find comparatively few stones or metal objects formally prepared for the specific purpose of weighing. A curious illustration from the camp experience will explain this. At the beginning of the work, in fitting out the camp, I had forgotten to provide a kitchen scales. Very soon a dispute arose among the servants about the weight of a piece of meat, which the cook declared was too light; to settle the question we were obliged to borrow a pair of scales, with weights, from the village. The scales (a rough balance of wood) arrived, with a single weight—a plain oval field stone, not worked or altered in any way, which had been found by experiment to weigh about a *rotl* (the ordinary standard, between five and six pounds). It appeared that this weight was in regular use in the village. Even in Jerusalem, the itinerant vendors of goods sold by weight, use odds and ends of scrap-iron to measure out the purchases of their customers. No doubt the same primitive methods prevailed in the ancient city with which we have to deal.

The only weights we can be sure about are of small size, probably used chiefly in goldsmiths' work or in weighing out the "current money with the merchant" that formed the medium of exchange. This is for us not altogether a disadvantage. The chief importance of ancient weights is the determination of the standard of measurement adopted; and it is evident that the smaller a weight is, the less likely it is to have a large margin of error. It will be clear to the student of the table given below that there is much inaccuracy in the weights—no two agree exactly, and it is only by taking the average of a large number that we can hope to arrive approximately at the true standard.

The weights found were almost all made of stone, except in the Hellenistic Period, when lead was sometimes used, without, however, displacing the other material. Hard, compact, and heavy stones, capable of taking a polish, such as haematite, jasper, basalt, and quartzite, are

the stones chiefly used. There are a few well-defined shapes, the chief of which are shown in fig 429. One of the commonest is the spindle or shuttle form (no. 2)—a long weight, thickest in the middle and brought to a blunt point at both ends, with one side flattened to serve as a base. This type is usually made of haematite. Occasionally, but not often, there is a mark on the base or back which may be supposed to have indicated to the owner the amount of the weight—a single stroke is the commonest. This form begins to appear in the Second Semitic Period, and lasts down to the Hellenistic. Dome-shaped weights (no. 3) on flat bases come into use a little later. These are either hemispherical, or more or less cylindrical,

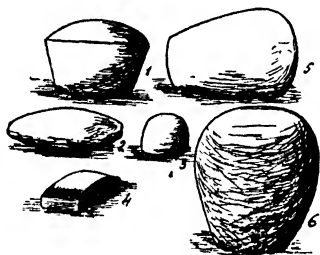


FIG. 429.—TYPICAL FORMS OF WEIGHTS

with convex top and plane base; sometimes the sides, instead of being upright, expand upwards like an inverted cone (no. 1). In the Persian and early Maccabaeon Period these weights are sometimes inscribed with words or marks to denote their value. Inscribed dome-shaped weights are relatively commoner than inscribed shuttle-weights, but they are still greatly in the minority. Among less common forms may be mentioned no. 4, a flat, rectangular weight with a cushion-shaped top.

Here follows a list of the undoubted weights found in Gezer. The amounts are stated in grammes

A FROM THE ROCK (PROBABLY IN MOST CASES SECOND SEMITIC)

5 20 : dome-shaped, haematite  
5 52 : " " "

9 73 : dome-shaped, haematite  
10 07 : " " "

- \*10 21 · irregular, polished pebble.
- 12 06 · haematite pebble ground down on one side.
- 20 03 · shaped like a double-convex lens, bronze
- \*41 75 · pounder-shaped, one side chipped
- 42 52 · spindle-shaped, haematite.
- 43 67 · dome-shaped, a brown marble-like stone
- \*45 10 · cylindrical, compact basalt.
- 46 43 · pebble with one side ground flat.
- \*55 74 · pebble shaped like a spinning-top
- 66 76 · barrel-shaped, quartzite.
- 89 50 · shaped like an egg with the narrow end and one side ground flat.
- 91 35 · flat rounded disc, haematite.
- 99 50 · sphere with flattened base, quartzite
- 101 48 · dome-shaped, white limestone
- 170 28 · conical, quartzite (much chipped).
- 187 61 · dome-shaped, basalt.
- 456 33 · dome-shaped.

Those marked \* were found together in a heap of grain.

## B. SECOND SEMITIC PERIOD

- 2 34 · dome-shaped, of porcelain, green enamelled.\*
- 4 22 · rectangular disc, basalt.
- 43 6 · pebble of yellowish limestone with flattened side.
- 5 58 · dome-shaped, haematite
- 5 78 · spindle-shaped, haematite.
- 5 98         "                 "
- 9 75         "                 "
- 10 15 · flat square disc, basalt.
- 10 22 · flat oval disc  $\frac{1}{2}$ " thick,  $\frac{3}{4}$ " long, jasper
- 16 38 · dome-shaped pebble.
- 23 02 · rounded pebble with flattened base, haematite
- 25 42 · dome-shaped, quartzite.
- 27 55 · spindle-shaped, haematite.
- 28 20 · spindle-shaped, haematite (broken slightly, so that it is a little too light).
- 30 37 · frustum of cone, jasper.
- 34 75 · sphere, flattened on one side
- 47 57 · dome-shaped, limestone.
- 62 60 · dome-shaped (irregular shape) haematite.
- 65 18 · pebble smoothed on one side and polished.
- 71 30 · dome-shaped, quartzite.
- 90 58 · spindle-shaped, haematite.
- 91 31:         "                 "

---

\* This may be merely the bezil of a ring

- 111 35 : pounder-shaped.  
 167 40 : dome-shaped, flint

## C THIRD AND EARLY FOURTH SEMITIC PERIOD

- 2 83 : dome-shaped  
 3 63 : flattened dome-shaped, haematite.  
 \*3 80 : spindle-shaped, haematite, a stroke running part of the way along the major axis of the base  
 4 93 : dome-shaped, haematite.  
 \*5 25 : spindle-shaped, haematite.  
 5 49 : " "  
 5 77 : hemispherical haematite.  
 \*5 78 : dome-shaped, haematite, not well finished.  
 6 20 : spindle-shaped, haematite.  
 6 43 : serpentine, semi-cylindrical, with a longitudinal chamfer running parallel to the axis on the apex of the curve, and along the edge on each side.  
 7 25 : spindle-shaped.  
 7 35 : "  
 7 80 : dome-shaped.  
 8 68 : spindle-shaped, haematite; a cross scratched on the base.  
 9 36 : spindle-shaped, haematite.  
 9 70 : dome-shaped.  
 10 18 : haematite pebble, one side polished smooth.  
 11 40 : conical, alabaster  
 12 36 : spindle-shaped, haematite.  
 12 83 : " "  
 \*13 05 : " "  
 \*13 43 : " "  
 \*19 16 : " "  
 19 41 : dome-shaped, haematite.  
 21 48 : spindle-shaped, haematite.  
 22 40 : bottle-shaped, haematite.  
 23 24 : oval pebble, haematite.  
 23 29 : spindle-shaped, haematite.  
 29 55 : dome-shaped, granite.  
 29 86 : spindle-shaped, jasper.  
 34 70 : flat dome, grey limestone  
 43 75 : pyramidal, quartzite.  
 44 90 : dome-shaped  
 \*44 92 : spindle-shaped, haematite.  
 58 12 : spherical, haematite.  
 70 58 : pebble flattened one side, quartzite  
 88 30 : dome-shaped, quartzite.  
 91 39 : spindle-shaped, haematite.



- \*92·65 spindle-shaped, haematite.
- 93·45: as fig. 429, no 1, quartzite (chipped).
- 93·69 dome-shaped, quartzite.
- 95·22: spherical, one side flattened, haematite.
- 95·26: spindle-shaped, a straight scratch along the major axis of the base.
- 96·93: inverted frustum of cone (chipped).
- 109·31 dome-shaped.
- 119·70: spherical, one side flattened, quartzite.
- 128·05: dome-shaped, quartzite.
- 142·43 " "
- 182·75: spherical, one side flattened, quartzite.
- 453·21: dome-shaped, granite.

Those marked \* were from a hoard in IV 21. In a corner of a building here, which had been burnt, was a jar with a dish inside; all round was heaped up *kursenni*. In the burnt area, with some unimportant scraps of bronze, were these weights, and a number of pebbles of agate and chalcedony, smooth and water-worn, but not worked. The weights of 8·68 and 12·36 were found at the same level in the same pit, but did not form part of the hoard.

#### D. LATE FOURTH SEMITIC PERIOD

- 1·71: spindle-shaped, not polished.
- 1·83: as fig 429, no 4, haematite.
- 2·30: hemispherical quartzite, L faintly marked on top, and five small nicks round edge of base.
- 2·48: dome-shaped, iron pyrites.
- 3·24: dome-shaped.
- 4·27: " "
- 5·41: flat dome-shaped, limestone
- 5·55: hemispherical, haematite, not polished.
- 6·20: dome-shaped, on rectangular base with rounded corners.
- 6·58: lozenge-shaped, flat base, round back, basalt.
- 6·71: pyramidal, haematite.
- 6·80: dome-shaped.
- 6·84: sphere, haematite.
- 7·04: dome-shaped.
- 7·40: semi-cylindrical, crysolite.
- 7·90: dome-shaped, haematite.
- 8·99: flat disc, basalt.
- 9·015: jasper pebble, ground flat on one side.
- 9·20: dome-shaped, haematite.
- 9·72: " "
- 9·87: spindle-shaped, crystal.
- 10-20: dome-shaped, limestone

- 10865 · spindle-shaped, haematite
- 1126 · pebble, base flattened, haematite.
- 11315 · dome-shaped, haematite
- 1157 · conical, haematite.
- 1366 · dome-shaped, haematite
- 1432 · dome-shaped, limestone
- 1661 · haematite pebble, one side ground
- 1716 · oval, flat base, serpentine
- 2171 · spindle-shaped, serpentine
- 2241 · dome-shaped, black marble
- 2250 · dome-shaped.
- 2370 · cubical, haematite
- 2400 · dome-shaped, pyrites
- 3065 · dome-shaped, limestone
- 3895 · dome-shaped, marble.
- 4050 · hemispherical, a ring round the side
- 4160 · dome-shaped, dark limestone
- 4410 · dome-shaped limestone.
- 5067 · dome-shaped, quartzite
- 5125 · dome-shaped, diorite
- 6322 · dome-shaped
- 6472 · dome-shaped, quartzite.
- 6655 · flattish dome-shaped.
- 8610 · dome-shaped, reddish limestone
- 8763 · six-sided block, base flattened, and corners rounded off, haematite.
- 8985 · spindle-shaped, haematite.
- 9143 · dome-shaped, haematite.
- 9189 · flattened dome-shaped, haematite.
- 9240 · dome-shaped.
- 9870 · dome-shaped, quartzite.
- 10570 · half barrel-shaped, limestone.
- 11370 · oval, base flattened, as fig 429, no. 6, quartzite.
- 11830 · frustum of a cone, quartzite.
- 16995 · dome-shaped, black stone.
- 18011 · dome-shaped, grey limestone
- 18185 · dome-shaped, quartzite.
- 41007 · dome-shaped, reddish limestone: a hollow in the base to bring the weight down to the required amount.

#### E. PERSIAN AND HELLENISTIC PERIODS

- 184 · cylindrical, one end cut off obliquely.
- 190 · spindle-shaped, haematite.
- 233 · dome-shaped
- 254 · „

- 2'92 spindle-shaped.  
 3'21. " "  
 3'75: similar to fig. 429, no. 4, haematite.  
 3'84. dome-shaped, LL marked on top  
 4'85: dome-shaped, a groove round base, porphyry.  
 4'92: a fossil *echinus*, ground down to size required.  
 5'00. dome-shaped.  
 5'60. egg-shaped, diorite.  
 5'81. small cylindrical.  
 5'90 dome-shaped, haematite  
 5'99. spindle-shaped, haematite  
 6'00 spindle-shaped, IIII on base  
 6'10 egg-shaped, one side ground flat, limestone.  
 6'11 dome-shaped, inscribed בקע on top (fig. 430)  
 6'41: dome-shaped, a deep groove surrounding it vertically, crossing over the apex and under the base.  
 7'04. dome-shaped, rather irregular  
 7'05. dome-shaped, + marked on top  
 7'27. dome-shaped, marble, inscribed פים on top (fig. 431)  
 7'62. dome-shaped, not polished.  
 7'65. pebble, haematite  
 8'34 flattened dome-shaped, porphyry  
 8'81 dome-shaped, haematite  
 8'88. dome-shaped, bronze.  
 9'14. sphere, base flattened, alabaster.  
 9'28 dome-shaped, faintly inscribed נעף on top  
 9'32 dome-shaped.  
 10'50. conical  
 10'50 dome-shaped  
 11'29 dome-shaped, limestone  
 11'30. dome-shaped, inscribed אI on top (fig. 432).  
 11'375: dome-shaped, quartzite, inscribed אI on top.  
 11'81. dome-shaped, jasper, reduced to required weight by a hollow in base.  
 12'13 stone pebble.  
 12'15 dome-shaped, haematite.  
 15'66: dome-shaped, quartzite, brought up to required weight by a plug of lead in base.  
 16'78: dome-shaped on oval base, haematite.  
 18'48: long, flat, serpentine.  
 22'28 bronze, frustum of a pyramid inscribed למלך II, bronze (fig. 433).  
 22'40: long, polished, flattened base, serpentine (slightly chipped).  
 22'50 dome-shaped, inscribed אII on top  
 22'80 long, flat, haematite.



FIG 430 — IN-  
SCRIBED WEIGHT



FIG 431 — IN-  
SCRIBED WEIGHT



FIG 432 — IN-  
SCRIBED WEIGHT

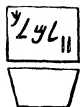


FIG 433 — IN-  
SCRIBED WEIGHT

- 25 50 cubical, bronze.  
 25 91 lead disc with tree and knobs stamped on it (fig. 434)  
 30 40 long, flat, haematite.  
 32 08 pebble ground one side, diorite  
 34 71 spindle-shaped.  
 40 34 " "  
 44 88 dome-shaped  
 45 015 rough pebble, quartzite, one side ground flat  
 45 17 dome-shaped, rather flat, limestone  
 45 69 dome-shaped  
 45 75 " "  
 47 40 " "  
 51 92 dome-shaped, quartzite.  
 61 88 dome-shaped, rather irregular, quartzite  
 63 15 sphere, one side flattened, haematite  
 64 47 parallelepiped of clunch,  $2\frac{1}{4}$ " long, with IIII' scratched on one end.  
 66 73 dome-shaped.  
 72 77 flattened pestle-shape, limestone.  
 73 15 cylindrical, haematite  
 76 25 truncated cone, diorite.  
 88 025 dome-shaped, quartzite  
 89 20 pestle-shaped.  
 91 12 spindle-shaped, quartzite  
 91 43 dome-shaped, haematite  
 91 89 " "  
 94 60 dome-shaped, quartzite, inscribed  $\alpha$  J  
 107 62 flat disc, diorite.  
 133 52 dome-shaped, bronze  
 155 32 dome-shaped, quartzite, weight reduced to required amount by hollow in base (rather chipped).  
 164 39 dome-shaped, quartzite  
 180 11 spindle-shaped  
 204 25 dome-shaped, black basalt  
 223 78 dome-shaped, quartzite  
 263 60 leaden disc, square, with two cornucopias and  $\Delta$  upon it (fig. 435)  
 294 97 pounder-shaped.  
 319 00 leaden disc, inscribed  $\Lambda^* \text{ΑΓΟΠΑΝΟΜΟΥΝΤΟΙΣ ΚΩΚΙΤΑΤΡΟΥ Μ}$  (fig. 436).  
 459 12 wedge-shaped leaden disc, no device.  
 553 12 leaden disc similar to fig. 436, but without device or inscription.  
 575 67 similar to preceding, a square sinking on each side



FIG 434 —LEADEN WEIGHT

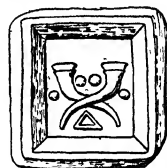


FIG 435 —LEADEN WEIGHT

We must now see whether it is possible to arrange these weights in sequences according to their standards. Before doing so we may anticipate

a little, in order to find what margin of error is admissible in assigning a weight to its standard. Fortunately a series of weights with the value marked, found at Gezer, Tell Zakariya, and Jerusalem, come to our aid. These were found in the Persian or Hellenistic debris, and the Gezer



FIG 436—INSCRIBED LEADEN WEIGHT

examples have been enumerated in the foregoing list. The symbols indicating the weight are a mark  $\alpha$ , denoting the standard, and the symbols I, II, L, and J, signs easily interpreted as denoting the figures 1, 2, 4, and 8, by the proportions of the weights, though not belonging to any system of notation otherwise known. The weights of this series are as follows:—

11.3	marked	$\alpha I$	(= $x$ )	Gezer
11.37	"	$\alpha I$	(= $x + 0.07$ )	"
22.5	"	$\alpha II$	(= $2x - 0.1$ )	"
24.5	"	$\alpha II$	(= $2x + 1.9$ )	Jerusalem ( <i>ZDPV</i> , v 337)
44.6	"	$\alpha L$	(= $4x - 0.6$ )	Zakariya ( <i>EP</i> , p 145)
45.6	"	$\alpha L$	(= $4x + 0.4$ )	" ( " " )
46.0	"	$\alpha L$	(= $4x + 0.8$ )	Jerusalem ( <i>ZDPV</i> , v 337)
90.0	"	$\alpha J$	(= $8x - 0.4$ )	" (Bliss, <i>Exi Jer</i> p 267)
93.0	"	$\alpha J$	(= $8x + 2.6$ )	Tell el-Judeideh ( <i>EP</i> , p 146)
94.6	"	$\alpha J$	(= $8x + 4.2$ )	Gezer

From this it appears that even in the comparatively civilised latest period a considerable latitude has to be allowed, especially in the higher multiples of the standards. *A fortiori* we may expect similar or even greater errors in the earlier periods. For this reason we will not consider any weight over 100 grammes in the following investigation. Although

in two weights in the above table the error exceeds 2 grammes, no error larger than 1.99 will be admitted as valid in the following analysis.

The standards that seem to emerge may for the moment be indicated by letters of the Greek alphabet, and their apparent multiples by algebraical formulae.

In § A we have—

$5.20 = a$	$[6.03 = \beta]$
$5.52 = a + 0.32$	$?9.73 = 1\frac{1}{2}\beta + 0.69$
$10.07 = 2a - 0.33$	$12.06 = 2\beta$
$10.21 = 2a - 0.19$	$42.52 = 7\beta + 0.31$
$20.03 = 4a - 0.77$	$?43.67 = 7\beta + 1.55$
$?45.10 = 9a - 1.70$	$?55.74 = 9\beta + 1.47$
$46.43 = 9a - 0.37$	$66.76 = 11\beta + 0.43$
$?55.74 = 11a - 1.46$	$?91.35 = 15\beta + 0.90$
$?66.76 = 13a - 0.84$	
$?99.50 = 19a + 0.70$	

Weights which deviate by more than 0.50 grammes from multiples of the assumed standard are marked with a query. The lightest weight being taken as the standard for comparison, the accuracy of other weights must to some extent depend on that of the lightest weight of the series. It will be noticed that all the weights in this section under 100 grammes fit more or less satisfactorily into these two series. Two of them are ambiguous.

Analysis of the weights in § B gives —

$2.34 = \frac{1}{2}a - 0.26$	$?4.22 = \frac{2}{3}\beta + 0.20$
$?4.22 = a - 0.98$	$5.78 = \beta - 0.25$
$?4.36 = a - 0.84$	$5.98 = \beta - 0.05$
$5.58 = a + 0.38$	$9.75 = 1\frac{1}{2}\beta + 0.71$
$10.15 = 2a - 0.35$	$?23.02 = 4\beta - 1.10$
$10.22 = 2a - 0.18$	$30.37 = 5\beta + 0.22$
$?16.38 = 3a + 0.68$	$?47.57 = 8\beta - 0.67$
$?25.42 = 5a - 0.58$	$90.58 = 15\beta + 0.13$
$?27.55 = 5a + 1.55$	$?91.31 = 15\beta + 0.86$
$62.60 = 12a + 0.20$	
$71.30 = 15a - 1.50$	

Here again all the weights under 100 grammes fit fairly closely into one or other of the two series, with the exception of three 28.20, which is broken, and therefore too light (it is probably to be equated to the next weight, 30.37); and the two 34.75, 65.18, which are quite irreconcilable

In § C the weights are more recalcitrant.—

$$\begin{aligned}
 2'83 &= \frac{1}{2}a + 0'23 \\
 5'25 &= a + 0'03 \\
 5'49 &= a + 0'29 \\
 ?5'77 &= a + 0'57 \\
 ?5'78 &= a + 0'58 \\
 ?9'36 &= 2a - 1'04 \\
 ?9'70 &= 2a - 0'80 \\
 10'18 &= 2a - 0'22 \\
 21'48 &= 4a + 0'68 \\
 88'30 &= 17a + 0'10 \\
 93'45 &= 18a - 0'15 \\
 93'69 &= 18a + 0'09
 \end{aligned}$$

$$\begin{aligned}
 3'63 &= \frac{1}{2}\beta + 0'48 \\
 ?3'80 &= \frac{1}{2}\beta + 0'65 \\
 4'93 &= \frac{3}{4}\beta + 0'21 \\
 6'20 &= \beta + 0'17 \\
 6'43 &= \beta + 0'40 \\
 ?7'25 &= \beta + 1'22 \\
 ?11'40 &= 2\beta - 0'66 \\
 12'36 &= 2\beta + 0'30 \\
 ?12'83 &= 2\beta + 0'77 \\
 ?23'24 &= 4\beta - 0'88 \\
 ?23'29 &= 4\beta - 0'83 \\
 ?29'55 &= 5\beta - 0'60 \\
 29'86 &= 5\beta - 0'29 \\
 96'93 &= 16\beta + 0'45
 \end{aligned}$$

Here even among the weights analysed above there is a good deal of uncertainty, and a good many weights cannot be forced into either series on any reasonable terms. Another standard must therefore be sought. The hoard found in IV 21 would seem especially promising for examination, as it is probable from their similarity and grouping that they belonged to some definite system, and as most of them are irreconcilable with the assumed standards  $a$ ,  $\beta$ . The weights are 350, 525, 1305, 13'45, 1916, 4492, and 9265; with which might be grouped the similar weights 8'68, 1236, found as above stated close by. It would seem probable in such a sequence as this, that 9265 would be meant to be double the weight represented by 4492, and taking the average of 9265 with  $4492 \times 2$ , or 8984, we get 91'24. To this can be equated the weight 9139; and probably the two similar weights, 95'22, 9526, are heavy variants of this, the error, as we have already seen, being greater in the higher multiples of the standard. In the same way, to 4492 can be correlated 4374 and 4490. The half of this again is represented among the weights in § C by 22'40: and 5'25 and 1236, though, as we have seen, they fit fairly well into series  $a$  and  $\beta$  respectively, might possibly stand for quarter and half of this last weight respectively. But the two weights 7'35 and 7'80, which presumably are meant to be identical, are nearly  $\frac{1}{4}$  of 22'40; and if we assume their average as the new standard  $\gamma$ , these last may be returned to their places in  $a$  and  $\beta$ . We then have:—

$$\begin{aligned}
 7'35 &= \gamma - 0'22 \\
 [7'57 &= \gamma] \\
 7'80 &= \gamma + 0'23 \\
 22'40 &= 3\gamma - 0'31 \\
 ?43'75 &= 6\gamma - 1'67 \\
 ?44'90 &= 6\gamma - 0'52 \\
 44'92 &= 6\gamma - 0'50 \\
 ?91'39 &= 12\gamma + 0'55 \\
 ?92'65 &= 12\gamma + 1'81 \\
 ?95'22 &= 12\gamma + 4'38 \\
 ?95'26 &= 12\gamma + 4'42
 \end{aligned}$$

It will be remembered that there was a weight in § B, 65·18, which was left over as unmanageable. This comes close to 70 58. The average of these two weights is 67·88, which is very near 68·13, that is  $\gamma\gamma$ . It is therefore not unreasonable to suppose that this is the amount intended

The following weights now remain to be placed: 8·68, 13·05, 13·43, 19·16, 19·41, 34·70 [34·75 in § B], 58·12. Now it is evident that these fall for the greater part into pairs; also that the 34 pair is probably meant to be double of the 19 pair. The averages of these two pairs are 19·285 and 34·725 respectively: the average of  $19 \cdot 285 \times 2$  and 34·72 is 36·64. One-third of this gives 13·21, which is very close to the average of the 13 pair. In short, if we assume a theoretical standard of 4·40, we shall get the following correspondence:—

$$\begin{aligned} [4\cdot40 &= \delta] \\ 8\cdot68 &= 2\delta - 0\cdot18 \\ 13\cdot05 &= 3\delta - 0\cdot15 \\ 13\cdot43 &= 3\delta + 0\cdot23 \\ ?19\cdot16 &= 4\delta + 1\cdot56 \\ 19\cdot41 &= 4\delta + 1\cdot86 \\ 34\cdot70 &= 8\delta - 0\cdot50 \\ 34\cdot75 &= 8\delta - 0\cdot45 \\ 58\cdot12 &= 13\delta + 0\cdot92 \end{aligned}$$

which accounts for all the remaining weights.

In the two remaining sections we suffer from an *embarras des richesses*, in the form of a series of weights in which the intervening gaps are so completely filled up that it is hard to say where one multiple of a standard ends and the other begins. If we try to pick out the standards already indicated we find —

$2\cdot30 = \frac{1}{2}a - 0\cdot30$	$3\cdot24 = \frac{1}{2}\beta + 0\cdot23$	$1\cdot71 = \frac{1}{2}\gamma + 0\cdot07$	$2\cdot30 = \frac{1}{2}\delta + 0\cdot10$
$2\cdot48 = \frac{1}{2}a - 0\cdot12$	$6\cdot20 = \beta + 0\cdot17$	$1\cdot83 = \frac{1}{2}\gamma + 0\cdot19$	$4\cdot27 = \delta - 0\cdot13$
$5\cdot41 = a + 0\cdot20$	$?6\cdot58 = \beta + 0\cdot55$	$?3\cdot24 = \frac{1}{2}\gamma - 0\cdot58$	$8\cdot99 = 2\delta + 0\cdot19$
$5\cdot55 = a + 0\cdot35$	$?6\cdot71 = \beta + 0\cdot68$	$?7\cdot04 = \gamma - 0\cdot53$	$9\cdot015 = 2\delta + 0\cdot215$
$?9\cdot87 = 2a - 0\cdot53$	$?6\cdot80 = \beta + 0\cdot77$	$7\cdot40 = \gamma - 0\cdot17$	$9\cdot20 = 2\delta + 0\cdot40$
$10\cdot20 = 2a - 0\cdot40$	$?6\cdot84 = \beta + 0\cdot81$	$7\cdot90 = \gamma + 0\cdot33$	$?9\cdot72 = 2\delta + 0\cdot92$
$10\cdot865 = 2a + 0\cdot465$	$?11\cdot26 = 2\beta - 0\cdot80$	$?14\cdot32 = 2\gamma - 0\cdot82$	$13\cdot66 = 3\delta + 0\cdot46$
$41\cdot60 = 8a$	$?11\cdot315 = 2\beta - 0\cdot745$	$?6\cdot655 = 9\gamma - 1\cdot57$	$?16\cdot61 = 4\delta - 0\cdot99$
	$11\cdot57 = 2\beta - 0\cdot49$	$?8\cdot985 = 12\gamma - 0\cdot99$	$17\cdot16 = 4\delta - 0\cdot54$
	$23\cdot70 = 4\beta - 0\cdot42$	$?91\cdot43 = 12\gamma + 1\cdot39$	$21\cdot71 = 5\delta - 0\cdot29$
	$24\cdot00 = 4\beta - 0\cdot12$	$?91\cdot89 = 12\gamma + 1\cdot05$	$22\cdot41 = 5\delta + 0\cdot41$
		$98\cdot70 = 13\gamma + 0\cdot29$	$22\cdot50 = 5\delta + 0\cdot50$
			$30\cdot65 = 7\delta - 0\cdot15$
			$?38\cdot95 = 9\delta - 0\cdot65$
			$44\cdot10 = 10\delta + 0\cdot10$
			$?50\cdot67 = 12\delta - 1\cdot13$
			$?64\cdot72 = 15\delta - 1\cdot38$
			$92\cdot40 = 21\delta$



Now though most of the weights in this list can thus be divided between the four standards, this table is not altogether convincing. An impression is created that a certain amount of forcing is necessary to make the weights conform to one standard or another: and the number of weights *in excess* of the proper amount is suspicious\*. On the whole, one has a suspicion that there is a change of standards in this list between § C and § D, and this suggests the advisability of examining § E before going further.

In § E we have at last indications of the standards on some of the weights: and this justifies us in bolder assumptions of error than could be admitted when we had no such guide. We have already mentioned the  $\alpha$  series, and it will be convenient to clear the ground by marking those that appear to belong thereto. Thus:—

2'54, 2'92	= $\frac{1}{4}\alpha$
5'00, 5'60, 5'81, 5'90	= $\frac{1}{2}\alpha$
11'29, 11'30, 11'375	= $1\alpha$
22'28, 22'40, 22'50, 22'80	= $2\alpha$
34'71	= $3\alpha$
44'88	= $4\alpha$
89'20, 91'12, 91'43, 91'89, 94'60	= $8\alpha$

Turning back to the previous period, we can fairly separate the following:—

2'30, 2'48	= $\frac{1}{4}\alpha$ (note that L denotes 4, in the numeral system on these weights)
5'41, 5'55	= $\frac{1}{2}\alpha$
11'26, 11'31, 11'57	= $1\alpha$
21'71, 22'50, 23'70, 24'00	= $2\alpha$
44'10	= $4\alpha$
66'55	= $6\alpha$
89'85, 91'43, 91'89	= $8\alpha$

Another standard is indicated by בָּקָע, "half" on the top of a weight of 611. Probably all the weights 610, 6'11, 6'41, 7'04, and 7'05 are meant to be of this amount; the + on the top of the last of these is a not improbable symbol for "half." These give an average of 6'54, which indicates a standard of 13'08. Then we have:—

3'21	= $\frac{1}{2}\epsilon$
6'10, 6'11, 6'41, 7'04, 7'05	= $\frac{1}{2}\epsilon$
25'50	= $2\epsilon$
40'34	= $3\epsilon$
51'92	= $4\epsilon$
64'47 (marked with five strokes), 66'73	= $5\epsilon$

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\* As commercial transactions consist of receiving as well as giving, of course heavy weights were as necessary to Gezerite mercantile transactions as were light weights—the latter to weigh the goods, the former to weigh the money received. Nearly every one of these insignificant stones must in its time have been the centre of many a violent dispute, there is no wonder that the author of Proverbs x1 i expressed his irritation at "false balances."

And in the previous period.—

6.20, 6.58, 6.71, 6.80, 6.84, 7.04	= $\frac{1}{2}e$
13.66	= $e$
40.50	= $3e$
51.25	= $4e$
64.72	= $5e$

Again, we have a weight of 7.27 inscribed  $\text{D}^{\text{B}}$ . A similarly inscribed weight of bronze, rather heavier, was found in Jerusalem. The inscription is interpreted by Prof. Cleimont-Ganneau (*Recueil d'archéologie orientale* VIII § 14) as meaning "two-thirds." Assuming this, the standard must be 10.90 or a little more: that is, the weight belongs to the  $\alpha$  series. Probably the weights 7.62, 7.65 in § E, and 7.40, 7.90 in § D, are to be compared with this.

There is then a series of weights inscribed  $\text{N}^{\text{A}}$ , "half." The Gezer specimen is very worn: it weighed only 9.28 grammes, as against others from Tell Zakariya weighing 10.45, 10, and 10.21 grammes. The average of these four weights is 9.73, giving a standard of 19.46. This gives in § E—

3.84, 4.85, 4.92	= $\frac{1}{4}\zeta$
9.14, 9.28, 9.32, 10.50	= $\frac{1}{2}\zeta$
18.48	= $\zeta$
51.92	= $3\zeta(?)$
72.77, 73.15, 76.25	= $4\zeta$
91.12, 91.43, 91.89, 94.60	= $5\zeta$

And in § D—

3.24, 4.27	= $\frac{1}{4}\zeta$
9.20, 9.72, 9.87	= $\frac{1}{2}\zeta$
17.16	= $\zeta(?)$
38.95	= $2\zeta(?)$
92.40	= $5\zeta$

The heavy leaden weight, 319.00, is a light mina: 459.12 is a more accurate weight, though this is rather too heavy.

It is hardly worth the space that would be needed to follow further the intricacies of these miracles of dishonesty! It may just be suggested in conclusion that the standard we have called  $\alpha$  (5.20 grammes) may be  $\frac{1}{3}$  the Babylonian gold shekel of 16.83 grammes: the standard  $\beta$  (6.03),  $\frac{1}{4}$  the Babylonian silver shekel of 22.4 grammes: the standard  $\gamma$  (7.35),  $\frac{1}{2}$  the Phoenician silver shekel of 14.9 grammes: the standard  $\delta$  (4.40),  $\frac{1}{2}$  the Babylonian light gold shekel of 8.41 grammes: the standard  $\epsilon$  (11.30), the Babylonian light silver shekel, 11.2 grammes: the standard  $\epsilon$  (13.66),

the Hebrew shekel, 14.55 grammes. These comparisons were, it should be said, sought out after the standards were fixed from a comparison of the weights themselves, and were not first looked out in order to force the weights to fit them. But that this bewildering subject is exhausted here cannot be claimed.

*Seals*, among a people to whom writing was the accomplishment of the few, were an absolute essential to a far greater extent than those living under modern European conditions can conceive. The impression of the seal took the place for which the signature is in Europe deemed sufficient. Much the same state of matters persists in the modern East; a little experience of oriental business transactions shews the importance which these instruments must have held in ancient times.

It is not therefore surprising that seals were among the commonest of the minor finds in Gezer. The majority of the seals found were scarabs or imitations of scarabs, and it will be better to describe these with the rest of the objects of Egyptian provenance or made after Egyptian models, at the beginning of the following Chapter. A number of cylinders were also found, and these, even though some are certainly of Syrian manufacture, will be illustrated and described in the section on Mesopotamian influence in the same Chapter. We deal therefore in this section with the comparatively few left over, which do not belong to either of these classes.

Seals were made of stone of various kinds, ivory, metal (usually in the form of a seal-ring), enamelled porcelain (in Egyptian examples), or hard-baked pottery. They were of various shapes, the commonest being conical with a slightly convex base on which the device was engraved, and with a hole near the apex for suspension. The impression was made on a lump of clay, like the clay of which tablets were made; but it is not unlikely that wax (which would by now have decomposed) was also sometimes used; and it is even possible that the modern Eastern method of smearing the face of the seal with ink and printing it on a document is a survival of an ancient tradition.

Besides business documents, seals were used as ownership or securing marks on such objects as jar-stoppers, as in Pl. cc, fig. 1, which represents a jar-stopper of brick, belonging to the Persian Period\* that

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\* It was found under the floor in one of the rooms of the Maccabean Castle.

has been secured with a cord over which four impressions of a seal are traceable. The seal has been inscribed with a Hebrew inscription of two lines, but the disintegration of the pottery rendered decipherment utterly hopeless. Seals were also used by potters to sign their handiwork. It is remarkable how very few seals and seal impressions were found in Gezer that bore writing of any kind, with the exception of the scarabs, some of which had hieroglyphics upon them. Not a single cylinder with a cuneiform inscription was found, and, except the jar-handle stamps already mentioned, and the Rhodian stamps enumerated on a later page, not a single stamp with a Hebrew or Greek inscription came to light.

The following is a list of seals and seal impressions discovered in the course of the excavation. Scarabs, cylinders, and other Egyptian and Mesopotamian types of seal, and impressions that appear to have been made from them, are here excluded.

*Pre-Semitic Period*—none.

*First Semitic Period*

1. Basalt, rectangular disc: an animal with curled tail walking (Pl. cc, fig. 2).

*Second Semitic Period*—none.\*

*Third Semitic Period*

- 2 Basalt polished: rectangular disc: on one side a tree, on the other an animal walking (Pl. cc, fig. 3).

- 3 Soft chalky limestone, conical: a cross of four L's, dots in the angles (Pl. cc, fig. 4).

4. Soft chalky limestone, irregular rectangular in shape: meaningless and random device (Pl. cc, fig. 5).

5. Hard compact limestone, scaraboid shape: two rude figures of men with a vertical stroke between them: below, an animal (Pl. cc, fig. 6).

[This is the first of a number of seals of hard limestone with very coarsely executed designs upon them representing, for the greater part, figures of animals (principally stags or gazelles). They begin in the Third Semitic Period, but are commonest during the Fourth.]

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\* Scarabs and cylinders were used practically exclusively before the Third Semitic Period.

6. Similar to the last: an animal, above it unintelligible marks (Pl. cc, fig. 7).  
 7. Limestone, conical: rude figure of a stag (Pl. cc, fig. 8).  
 8. Similar seal and device: (Pl. ccii a, fig. 13).  
 9. Conical seal of soft limestone with a mark, possibly an old Hebrew  $\aleph$  (fig. 437, no. 2).  
 10. Rude seal of soft limestone with a figure of a stag (fig. 437, no. 3).



FIG 437—SEALS

*Fourth Semitic Period*

11. Conical, limestone, with slightly convex base: six animals (Plate cc, fig. 9).  
 12. Similar: large stag and two small deer: below, a stag's head (?) (Pl. cc, fig. 10).  
 13. Similar: a man shooting a stag with a bow and arrow: a small animal below (Pl. cc, fig. 11).

14. Similar: a man standing, unintelligible marks around (Pl. cc, fig. 12).  
 15. Limestone, scaraboid form; an animal with a plant (?) in front (Pl. cc, fig. 13).  
 16. Limestone, conical. two stags fighting (Pl. cc, fig. 14).  
 17. Scaraboid, basalt: very rude animal (?) device (Pl. cc, fig. 15).  
 18. Scaraboid, limestone: a man and a scorpion (Pl. cc, fig. 16).  
 19. Scaraboid, limestone: a man and animal (Pl. cc, fig. 17).  
 20. Clay, conical: apex broken off. Two animals. The four-prong objected

in the middle probably represents the horns of the lower animal. The device is *in relief* on the seal, which is very unusual (Pl. cc, fig. 18).



FIG. 438.—SCARAB AND SEALS

21. Limestone, scaraboid form. An animal with head recurved: above, a bird (Pl. cc, fig. 19)

22. Limestone, scaraboid form. An animal, unintelligible marks above and below (Pl. cc, fig. 20).

23. Square disc of basalt, twelve sinkings on one side, two curves between four sinkings on the other (Pl. cc, fig. 21).

24. Square disc of limestone, a man followed by an animal, the design crudely scratched (Pl. cc, fig. 22).

25. Conical, soft chalky limestone, top broken off. A square of four lines in a circle (Pl. cc, fig. 23).

26. Limestone, oval disc with bevelled edges. An ape (Pl. cc, fig. 24).

27. Black marble, polished: square disc (perforated, like nos 3, 21, for mounting on a pivot). Two animals, one on each side (Pl. cc, fig. 25).

28. Silver ring, with a crystal setting a figure holding a sceptre (?), rays (?) issuing from the head (Pl. cc, fig. 26).

29. A sealing in black clay representing a bee (?) (fig. 437, no. 4)

30. Conical, basalt, a deer suckling its young (fig. 437, no. 5).

31. Conical, four deer, two large, two small (fig. 437, no. 6)

32. Conical, ivory: a man (?) \* between two scorpions (fig. 437, no. 7)

33, 34. Two conical seals in basalt with deer devices (fig. 438 b, c). The roughly executed scarab was found together with them.

35. Oval, limestone: the perforation for suspension is not carried through. A

\* It looks more like an earwig, but the analogy of Pl. cc, fig. 27 makes it probable that a man is intended.

man and two animals (fig. 439). Compare the device on the limestone tablet fig. 209 *ante*.

36-38. The three seal impressions on the Assyrian tablets described in Chapter I.

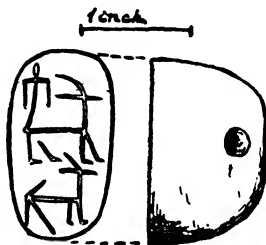


FIG. 439 — LIMESTONE SEAL

### *Hellenistic Period*

39. Scaraboid shape, limestone, a man between two scorpions (Pl. cc, fig. 27).

40. Conical, limestone, simple linear pattern (Pl. cc, fig. 28).

41. Conical, limestone, linear pattern ; a square with subsidiary lines (Pl. cc, fig. 29).

42. Signet-ring, silver, a cross with leaves in the angles within a hatched rectangle (Pl. cc, fig. 31).

43. Lump of soft chalky limestone, unintelligible geometrical pattern (Pl. cc, fig. 37)

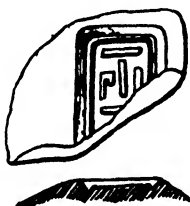


FIG. 440 — CLAY SEALING

44. Conical, haematite, a few irregular and random scratches without meaning or definiteness.

45. Conical, clay, a fret of diagonal lines.

46. A similar seal with similar device in soft limestone

47. Conical, glass, a horse or some such animal (Pl. cc, fig. 50).

48. Signet-ring, bronze, with oval seal : device corroded and unintelligible.

49-64. These are the sealings of jar-handles found in the Hellenistic stratum above described (p. 223) and represented in Pl. cc, figs. 32-36, 38-44, 46-48, and 51.

65. Fragment of clay with a sealing, two men and an animal (Pl. cc, fig. 45).

66. Fragment of clay with a sealing, a geometrical pattern (fig. 440).

67. Fragment of pottery with a sealing, a lion (fig. 436, no. 10).

68. A conical seal of limestone with a curved animal (fig. 437, no. 11)

69. A seal picked up on the surface of the ground, apparently belonging to the "deer" group (fig. 437, no. 12).

### *Byzantine Period*

A large number of bronze and iron signet rings were found in the tombs, nearly all too corroded, however, to make it possible to decipher the devices upon them. Some, indeed, appeared to have always been blank. Those that could be deciphered are shown in Vol. I, figs. 193, 194; Pl. lxxvii, fig. 14; Pl. xcvi, fig. 12; Pl. cxx, fig. 20. To these may be added the two following, picked up on the ground in the neighbourhood of the tombs —

70. Bronze signet with oval seal, bearing a sprig of a plant (?) (Pl. cc, fig. 30).

71. A very minute bronze signet, too small for any but a small child's finger, and probably meant for suspension. A summary design apparently meant for a person carrying an infant (? the Virgin and Child) (Pl. cc, fig. 49).

*Coins* were, of course, confined entirely to the Hellenistic stratum, and those discovered were neither numerous nor important. The great majority were defaced and corroded beyond hope of decipherment, and the endeavours that were made to clean them were total failures. Those decipherable were just of the types that were to be expected. A silver tetradrachm of Alexander the Great; some of the small copper coins of John Hyrcanus; a handful of the Seleucid and Ptolemaic dynasties; and a sprinkling of small Roman and Byzantine copper coins found in the late tombs, complete the numismatic record of Gezer. A number of coins of the Herods and of the later Roman emperors, a few (not many) provincial coins; two coins of Chosroes II were, as has been already mentioned, found in a long-opened tomb; and considerable quantities of early Arab coins with Cufic inscriptions are found by peasants ploughing in their fields. I picked up a small coin of the Tripoli mint of the Crusaders in walking down the slope of the hill one day—the solitary record of Mont Gisart that was found, if, indeed, Mont Gisart were ever established at Gezer; and we may just allude to the Nuremburg tokens found in two tombs, and to the old Spanish dollars still worn as ornaments by some of the peasant women. These later pieces cannot be catalogued here, as



they have nothing to do with the city of Gezer itself, and space will not permit our transgressing the limits that the history of the city prescribes.

### § 36—GAMES AND TOYS

*Games.*—Were we to search for special apparatus of recreation in the modern village—the conditions in which are often so instructive for comparison—we would find nothing more than a few packs of cards, possibly a draught-board or two (not necessarily with their men intact—stones or lumps of clay often take their place), some dice, and a few simple musical instruments. Children's toys would, I believe, be entirely absent. In some places we would find in the courtyards or floors of houses groups of little round pits about a couple of inches in diameter: these are extemporised draught-boards, in which games are played with pebbles for men. Of course many pastimes, such as racing, dancing, etc., require no special apparatus; and on these we cannot expect to find any light from the excavations, in the absence of wall sculptures or paintings. No less primitive apparatus, probably, served most of the requirements of the ancient Gezerites when in search of amusement, so that we cannot expect to have more than a very one-sided view of their recreations.

Among the apparatus of games which have survived, the most important place must be given to chequer-boards—flat plates of limestone with vertical and horizontal lines traced upon them. The oldest found was Pl. cci, fig. 10, which was from the Second Semitic stratum; the others come from the later periods. From the roughness and irregularity of the lines in several of these—notably figs. 3, 10—it is clear that they were extemporised to suit the requirements of the moment, just as children draw a new table for every game of "fox-and-geese." Most of the boards are broken, so that it is impossible in many cases to determine the exact number and the disposition of the squares; but it is evident that there must have been a great variety of games from the fact that no two boards are exactly identical in this respect. The most important game seems to have been played with three rows, of which only the middle row was necessarily divided into squares (contrast Pl. cci, figs. 3, 11 with figs. 2, 4, 7). Certain squares in the central row were marked with X, but what special virtue the rules of the game attached to such squares we have no means of knowing. In Pl. cci, fig. 1 there is a different disposition of the squares with this mark.

The following is a brief synopsis of the draught-boards on Pl. cci :—

- Fig. 1 from **IV 16**, 3 rows, 5 squares in each, 5 marked with X (= 15 squares).  
 " 2 " **IV 16**, 3 rows, 3(?) squares in each (= 9).  
 " 3 " Fourth Semitic, 1 row with perhaps two rows not divided into squares.  
 " 4 " **IV 16**, 3 rows, unfinished.  
 " 5 " **IV 8**, 2 rows, broken.  
 " 6 " **V 30**, 3 rows, 6(?) squares in each (= 18).  
 " 7 " Hellenistic, 3 rows, 5(?) squares, one marked with X (= 15). This was in red pottery—the only one found not of soft limestone.

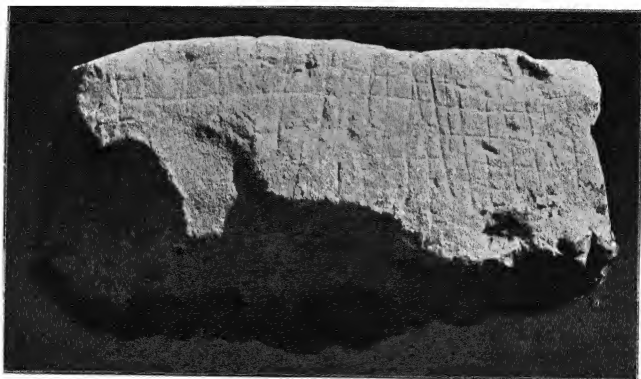


FIG. 441.—BUILDING-STONE SCRATCHED TO FORM A DRAUGHT-BOARD

- Fig. 8 from **IV 16**, 3 rows, 8 squares in each (= 24).  
 " 9 " **V a 27**, 4 rows, 7 squares in each (= 28).  
 " 10 " Second Semitic, 3 rows(?) two squares marked with X.  
 " 11 " **V 28**, 3 rows, the central only divided into squares, one of them marked with X. Imperfect.  
 " 12 " **VI 30**, 5 rows, 5 squares in each (= 25).

In the silt filling the Water-passage was a board resembling fig. 9, with 4 rows of 8 squares (= 32), and in **III a 26** was another of the same kind with 3 rows of 4 squares (= 12). It may be recalled that a fragment of a draught-board with X upon it was found at Tell es-Sâfi, but in this case the X was on the intersection of the lines, not on the square (*EP*, Pl. 19, fig. 16).

The stone shewn in fig. 441 was used in the construction of the important house at the S. end of VI 12. It has 4 rows apparently of 18 squares (= 72). Probably it was used by the house-builders to amuse themselves in the intervals of labour: their descendants who were employed in the excavations scratched just such game-boards to pass the time during the dinner interval. These, however, were more often groups of pits, rubbed by their fingers on the surface of the ground, like the pits made by boys playing marbles. Just such groups of pits were not infrequently

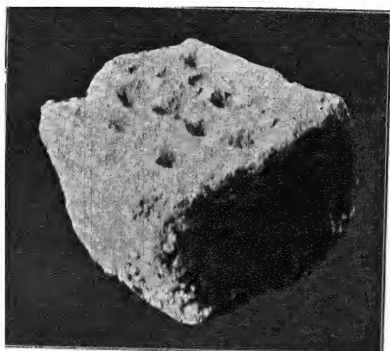


FIG. 441a.—BUILDING-STONE WITH PITS, POSSIBLY FOR A GAME

found in building-stones, probably with identical purpose; fig. 441a is an example.

The most elaborate draught-board found is shewn in fig. 442. It was from the Hellenistic stratum and measured  $12\frac{3}{4}$ " by  $8\frac{1}{2}$ " by  $1\frac{3}{4}$ ": one corner was gone. It had 11 rows of 16 squares (= 176). This is the largest number, I believe, yet found in a Palestine draught-board: next to it comes one from Tell Zakariya with 12 rows of 12 (= 144). See *EP*, p. 144.

For draughtsmen, small stones or lumps of clay may often have been used. In IV 2, for example, was found a collection of 13 small water-worn pebbles, each about the size of an ordinary ivory card-counter and perhaps three times as thick. These had evidently been collected on the

seashore and brought up, either to serve as draughtsmen, or perhaps to assist calculations, like the pellets of an abacus. In two or three places also, piles of the astragalus-bone of the sheep were used, polished smooth on the two plane sides; single specimens were likewise common. They were most frequent in the upper strata; close to the Maccabaeon Castle was found a pile of fifty such bones. These were no doubt used as play-things, as they were at Rome and elsewhere.

Some draughtsmen, very similar to those used in playing the modern game of "halma," were found, especially in the Third Semitic Period. These were made of enamelled porcelain, polished diorite, or in one case

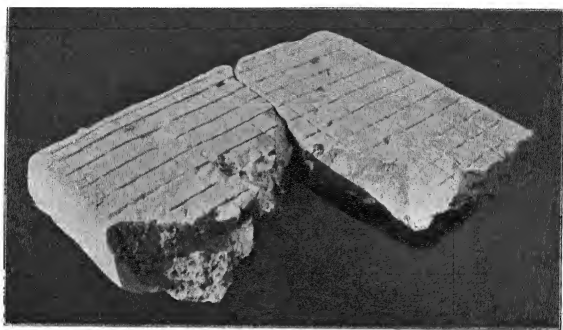


FIG. 442.—DRAUGHTBOARD

of chalcedony; a selection of types is added to Pl. cci (under fig. 5). These are of Egyptian origin; one, found in **V 28**, has the Egyptian letter *q* on the base. This is the only example with any special mark. The dice-box shape, of which an example from **V 28** is also shewn, is less common. The larger specimen on a square base (between figs. 5 and 7 on the Plate) is cut out of soft limestone; it no doubt is a local imitation of the better-finished Egyptian draughtsmen. It comes from **IV 13**.

The objects represented in fig. 443, nos. 1-7, are probably for use in some game of chance analogous to the modern "pitch-and-toss." They are discs of pottery or ivory, flat or double convex; on one side they are as a rule plain, on the other bear a simple device—that of four bars

ending with points (as in no. 4) is the commonest. In a few, however, there is a device on both sides.

No. 1 is a flat disc of pottery, with the device shewn on one side, the other side plain (Fourth Semitic). No 2 is a similar disc with a device on both sides (VI 6). No. 3 is a fragment of a similar disc of bone with a device on both sides (V 19). No 4 is the form which, as said above, is the commonest: specimens are found in Third or Fourth Semitic débris, and even later. this was from III a 29. No. 5 is a pottery imitation of this form, but flat, not double convex: it is from IV 8. Nos. 6, 7 are similar in shape and material to no 4, though differing in device: they are from IV 29 and IV 30 respectively.

These objects begin to appear about the transition from the Second

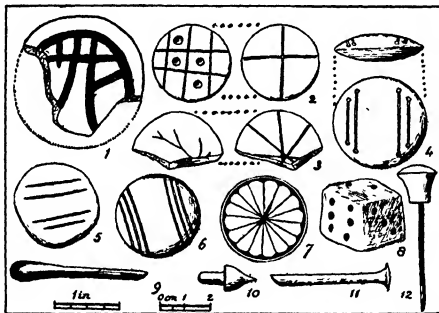


FIG 443.—INSTRUMENTS FOR GAMES

to the Third Semitic Period, and last till the end of the Fourth. In the Persian Period, apparently, dice, with the points distributed as in those of modern times,\* begin to make their appearance. They are, however, rare, and only three examples were found in the works—one, from between V and VI 7, of ivory, which is oblique, not rectangular, in shape: this, however, does not prevent its falling and standing indifferently on any of its six faces. The vertical height of the object is  $\frac{1}{2}$ " ; the points are narrow and deep depressions, disposed in the symmetrical figures still in use, but rather irregularly laid out. The angle between ace and deuce

\* Modern gamblers in Palestine use, without knowing it, the Persian numerals in reckoning the points on their dice

bears traces of a red colour with which, possibly, the whole was covered. The second (fig. 443, no. 8) is from the Hellenistic stratum: it is of limestone, of rather large size. The third, of very irregular shape, was found in tomb 40 (Pl. lxxviii, no. 26).

Small and well-polished pins of porphyry or (less commonly) ivory were found exclusively in the Hellenistic stratum (fig. 443, nos. 9-12; the first two are in porphyry, the other two ivory). These I suppose to have been used with a board pierced with holes (similar boards have been found in Egypt) for some game like solitaire. No trace of the necessary boards was found, from which we may infer that they were made of wood.

*Music.*—The modern peasants are fond of music—of a sort—and they accompany all their work with songs, and fill in their leisure with experiments on musical instruments

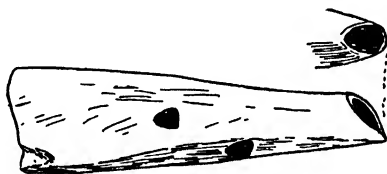
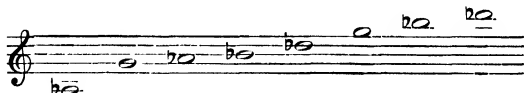


FIG. 444 —STONE WHISTLE

of home-made construction. These instruments are made of reeds, wood, hide, horse-hair, and such materials and though they no doubt are of traditional form—the ancestral forms could scarcely be much more primitive than their modern representatives—we cannot of course produce from the excavations anything tangible to shew the composition of a Gezerite orchestra. A small tube of steatite (fig. 444) came from the Third Semitic Period. It is conical in shape, 4" long  $1\frac{1}{2}$ " wide at one end and slightly under  $\frac{1}{2}$ " wide at the mouthpiece. It seems to have been a whistle, but some kind of reed must have been used to sound it. By leaving the two finger holes and the end open, or stopping them singly or in groups, the following notes are heard dully when the narrow end of the whistle is blown across (as in whistling on a key):



In passing, the possibility may just be mentioned that some of the minute pointed slips of bone often found were *plectra*.

*Toys.*—The small models of animals figured in Pls. cxxiv–cxxvi are probably in many cases children's toys.\* One or two were found with a hole drilled through one leg, which might have been for the child to drag them by. Small human figures might also have served the same simple purpose. Some of the shells that were found might have been

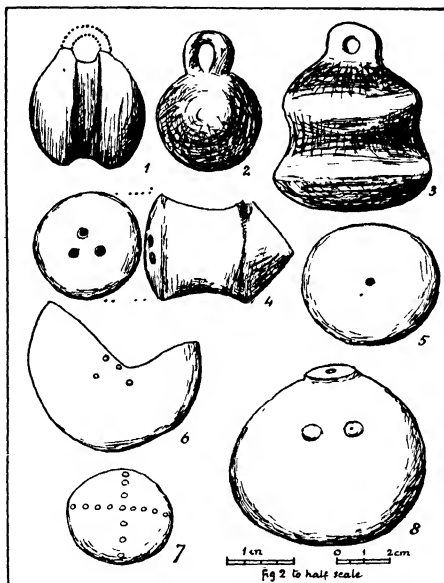


FIG 445.—POTTERY RATILES

used as playthings, the workmen sometimes asked for permission to take them away as toys for their own children.

The only other class of objects found that can be considered as toys are the earthenware rattles, of which a large number were found at Gezer.

\* For the custom of playing with clay models of animals the well-known sparrow story in the Apocryphal *Gospel of the Infancy* may be compared.

as they had previously been found in the Shephelah *tells*. Some of these objects appear too large and heavy for the hand of a child young enough to be amused by such toys, and it is possible that they might have been used in some religious rites like the *κρόταλα* described by the author of *De Dea Syra*. On the other hand, they do not make a loud enough noise for so important a purpose.

The various types of rattle found at Gezer are shown in fig. 445. They are all essentially similar—a box of clay, spherical or shaped like a dice-box, closed at both ends, but sometimes with one or more small perforations through the ends. I did not feel justified in breaking a specimen to determine the nature of the enclosed pellet; from the dull sound emitted it probably was a ball of clay; sometimes there appeared to be more than one pellet enclosed. The specimens figured show the different forms. No. 3, which is one of the few with a loop for suspension, is the oldest, being from II 28; the others range in date down to the end of the Fourth Semitic or possibly into the Hellenistic. No. 8 has evidently been in the form of a female torso; the head is missing. In Pl lxvi, fig 42 is shown a fragment of a rattle in the form of a bird, as is proved by a similar and complete specimen from Tell el-Hesi (*MMC*, Pl. 4, fig. 175).

But probably childhood in ancient Gezer was as short and as pathetically unchildlike as it is in modern Abû Shûsheh.

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NOTE ADDED IN PRESS.—It may be worth mention that the *Limekilns* marked on the map (Plate viii) are all of the Arab period



## CHAPTER VIII


### FOREIGN TRADE AND FOREIGN CONQUERORS

#### § 37.—EGYPT

RELICS of Egyptian influence came to light almost daily in the course of the excavation. Traces of the domination of Egypt in the fields of politics, art, trade, and religion were found in every stratum after the First Semitic, wherever a pit was dug.

Considerations of space, combined with the necessity of omitting no fact of importance, make it necessary to present most of the materials belonging to this section in the dry form of a classified catalogue. It may, however, be pleaded that to expand the description overmuch would virtually involve a dissertation upon Egyptian civilization, which lies outside the province of this work.

#### *A. Buildings*

The stone fig. 446 was found at **V 30 B**. It measures 3' 7" by 1' 10" by 1' 9". It was lying loose, not connected with any building. A stone 4' 5" in length stood upright close by. it belonged, however, to an earlier date, the foot being sunk so deep in the ground that the top was flush with the block under description. On one end is deeply incised half of the hieroglyphic  *nó* ("gold") with a stroke over it: these characters must have belonged to an inscription of great importance. The stone being too bulky to have been imported into the city, there is no admissible alternative to the view that it once formed part of a building covered with hieroglyphics, like the temples of the Nile. Nothing could be more impressive as an indication of the closeness of the Egyptian connexion with Gezer. This stone was the only part of the building that came to light.

There were no other specifically Egyptian buildings, though there was evidence that some of the houses were in the occupation of Egyptian residents, and that in

some of the tombs Egyptians had found a burial-place. Thus, tombs nos. 3 and 252 were apparently, in part at least, the sepulchres of Egyptians. There was no evidence of the practice of mummification, but no doubt even if the means were available, Egyptian residents who were able to afford this treatment of the bodies of their deceased friends would send them home for interment in Egypt itself. Of the houses, the most conspicuous example was the dwelling at the south end of II 6 (the occupation of which, however, is later in date than the First Semitic Period). This contained the statue described below, and the other Egyptian objects associated with it.



FIG. 446.—BUILDING-STONE WITH HIEROGLYPHIC LETTER

### B. Statues

(1) (fig. 447). A seated figure, carved from a block of gritty micaceous sandstone. It is set on a square pedestal,  $7\frac{1}{2}$ " high,  $1' 11\frac{1}{8}"$  along the sides, and  $1' 1\frac{1}{2}"$  across the front. There is no inscription on this pedestal, or indeed on any other part of the sculpture. The figure sits in an attitude familiar in Egyptian statuary, upon a low cushion with knees drawn up under the chin. Around the knees the arms are folded, the right arm being uppermost. In the right hand is clasped an 'ankh' symbol ( $\text{⚡}$ ); in

the left is a conical object, apparently an *uat* sceptre. The face (whose nose, always rather flat, is gone, through an unlucky stroke of the pick that brought the statue to light) has a short beard. On the head is the usual Egyptian wig. The right forearm and part of the underside of the pedestal were broken away, but were found where they had fallen. Otherwise the figure is perfect. A projecting pilaster runs up the back, down the middle of which is painted a narrow red line, crossed at top and bottom



FIG. 447.—EGYPTIAN STATUE

by a horizontal line in the same colour. It seems as though the sculptor had prepared the space for an inscription, but concluded that it was impossible to cut one owing to the gritty texture of the stone. The total height of the sculpture, inclusive of the pedestal, is 3'.

Whom this figure may represent, or for what purpose it stood in the house whose ruins covered it, there is nothing to shew. This house itself is shewn in fig. 448, which represents a section right through the débris of this building before it was completely cleared out, and indicates the condition in which it was found. In this

picture, AA are at the ends of the outer walls, projecting from the sides of the pit; and it will be seen that the space between these walls is filled in with loose rubbish. This rubbish displays evident marks of fire. Above this, at BB, are some layers of



FIG. 448.—RUINS OF HOUSE WHERE THE STATUE WAS FOUND

fine sandy stuff, and above that again the more compact remains of later strata, which did not come to so abrupt an end, but accumulated by a gradual process of

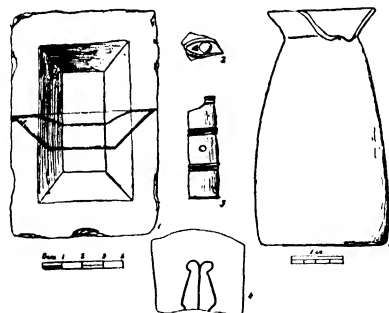


FIG. 449.—OBJECTS FOUND WITH THE STATUE

decay. The loose debris is principally broken brick, fire-baked, which had fallen into the area of the dwelling; the finer stratum above is not improbably the mud roof fallen on top of all.

The minor objects found in this house yet further attest the Egyptian connexions of its ancient occupants. The most important of these are shewn in fig. 449. No. 1 is a tray of diorite with a rectangular depression, evidently a painter's palette, as a dash of red colour still remains in the bottom. No. 2 is the eye of a green-enamelled figure. No. 3 a turned bar of bone, perforated. No. 4 a disc of ivory, with a feather crown upon it. Several similar fragments of ivory were found here, none, however, with any device upon them. No. 5 is a vase of alabaster. There were also found a pair of bronze tweezers, fragments of a Bügelkanne, and some other potsherds. Several of these objects display marks of the fire by which the house was destroyed.



FIG. 450.—STATUETTE OF HEQAB

(2) Fig. 450 shows the front and side views of a small polished granite figure  $4\frac{1}{4}$ " high, representing a man kneeling and seated on his heels. He wears a mantle with embroidered border, folded over the breast and held in position by the hands, which are disproportionately large. This figure was found in an ashpit, one of the round structures shewn in II 29. Over the thighs of the figure is an inscription in two lines, thus deciphered by Dr. Ll. Griffith :





"May the king give an offering to Osiris the living lord: he gives sepulchral feasts, clothing, divine incense, wax . . . to the citizen Dudu-Amen, son of . . . having been made for him by his beloved brother. He gives sepulchral feasts, an offering, divine food, to the double of the citizen Dudu-Amen."

Dr. L.I. Griffith, to whom I am indebted for a corrected rendering, dates this inscription "from the later middle kingdom, the so-called XIIIth Dynasty."

II. In VI 19 was found a small slab of syenite (fig. 452), apparently the bottom of a box of which the sides had been chipped away. The back half also has been lost. Its present length is  $4\frac{1}{4}$ ", its breadth  $3\frac{3}{8}$ ", its

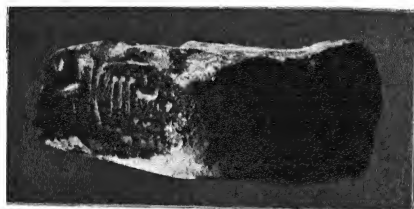
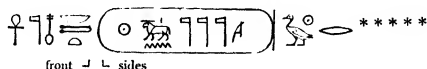


FIG. 452.—INSCRIPTION ON A STONE FRAGMENT

present thickness  $1\frac{1}{2}$ ". Round the vertical edge runs an inscription, the first character of which is in the middle of the front. Starting from this point the inscription reads both ways, symmetrically repeated, and stopping abruptly at the fracture by which the back half of the object has been lost. It reads:—



which is simply the prenomen and titles of *Ni'f'wrd* (Niafaaurut) I, the first king of the XXIXth Dynasty, who reigned 399-393 B.C.

III. (fig. 453). A plaque of terra-cotta from V 29, broken into several pieces. The conventional title of a king, "Son of the Sun," remains, but the part which contained the royal name is missing. At the upper end of the back is a knob which is also broken across. The plaque

is  $\frac{3}{8}$ " thick, and the fragments remaining measure together  $2\frac{1}{2}$ " top to bottom by  $2\frac{1}{4}$ " across at the fracture.

#### D. Scarabs

Among the large number of scarabs found, many were evidently poor local or at any rate provincial imitations of Egyptian models: the hieroglyphs being badly drawn, and the whole workmanship amateurish. That scarabs were actually made in Gezer was shewn by an unfinished specimen in limestone, found in IV 6. The outline was roughed, but the final processes of engraving, perforating, and polishing had not been carried out. Though of some use for chronological purposes, scarabs cannot be trusted



FIG. 453 --TERRA-COTTA PLAQUE WITH HIEROGLYPHS

too implicitly, as they could easily be transferred from owner to owner across several successive generations, and thus appear in a context later to that in which they properly belong. Less common, though not unknown, are cases in which they had somehow sunk into strata earlier than that where they would naturally be found. No scarabs were found certainly associated with the remains of the pre-Semitic or the First Semitic Periods. The following is a summary list of the scarabs found:—

#### *Second Semitic Period*

##### A TWELFTH DYNASTY AND HYKSOS SCARABS

















1, 2 Two amethyst scarabs found in cave 15 IV (Vol. I, p. 98, Pl. xxvi, figs 9, 10).







3-42 Scarabs from cave 28 II (Vol. I, p. 127, Pl. xxxi, figs. 4-27, xxxv).

43, 44. Scarabs from tomb I (Vol. I, p. 302, Pl. lxiii, figs. 79, 80).

45-53 Scarabs from tomb 3 (Vol. I, p. 304, fig 160).




54. Blue enamelled, no device (Pl. ccii *a*, fig. 6)
55. Steatite: female figure on chair with lion-shaped feet, in front , below . A wavy line crossing the elytra of the beetle diagonally (Pl. ccii *a*, fig. 7)
56. Jade: bottom splintered off, lower part of an animal remaining (Pl. ccii *a*, fig. 10).
57. Steatite: , surrounded by a chain of spirals Found in the silt filling cave 19 IV (Pl. cciii *a*, fig. 1).
58. Steatite symmetrical pattern of  and lotus flowers (Pl. cciii *a*, fig. 2).
59. Jade, no device (Pl. cciii *a*, fig. 3).
60. Steatite: imitation lettering inside spirals (Pl. cciii *a*, fig. 4).
61. Agate two figures, one with *maat* head-dress, the other wearing the double crown (?) (Pl. cciii *a*, fig. 6)
62. White (once green) enamelled name of *Amen* (Pl. cciii *a*, fig. 7)
63. Steatite: three columns of conventional lettering Found in a cistern in IV 18 (Pl. cciii *a*, fig. 19)
64. Steatite:  (Senwosret I) in an oval surrounded by spirals (Pl. cciii *b*, fig. 1).
65. Green enamelled,  (Pl. cciii *b*, fig. 2)
66. Green enamelled,  between two uraei, below , above a flying scarabaeus(?) (Pl. cciii *b*, fig. 3)
67. Steatite: symmetrical ornament (Pl. cciii *b*, fig. 4)
68. Green enamelled, half only a scorpion (Pl. cciii *b*, fig. 5)
69. Green enamelled, half only a bird (Pl. cciii *b*, fig. 6).
70. Steatite: ornamental pattern, from waste earth, but probably of this period (Pl. cciii *b*, fig. 9).
71. Steatite:  surrounded by spirals, from waste earth (Pl. cciii *b*, fig. 11)
72. Steatite:  and other characters, from waste earth (Pl. cciii *b*, fig. 12)
73. Steatite, defaced: apparently a symmetrical arrangement of  feathers (Pl. cciv *a*, fig. 1).
74. Steatite: two figures with a knot between them; below  (Pl. cciv *a*, fig. 2)
75. Steatite: conventional hieroglyphs between spirals (Pl. cciv *a*, fig. 3).
76. Steatite: a sphinx walking, looking backwards, a uraeus (?) above With Second Semitic pottery from cave 16 II (Pl. cciv *a*, fig. 8)
77. Steatite: a figure, in front a uraeus, below , a shaded double line round margin (Pl. cciv *b*, fig. 1)
78. Steatite: symmetrical arrangement of  and other signs. This scarab was broken into three pieces (Pl. cciv *b*, fig. 2).
79. Steatite: symmetrical pattern of  (the upper  broken), inside spiral (Pl. cciv *b*, fig. 3)

- 80 Steatite, fragment only a cartouche, nearly all lost, with ♀ on each side (Pl cciv b, fig 4)
- 81 Limestone rude local manufacture. A lion and two circular marks above. Probably later than its context (Pl cciv b, fig 5).
82. Steatite, coloured blue symmetrical device (Pl cciv b, fig 7).
- 83 Steatite. symmetrical arrangement of a large number of symbolical characters (Pl cciv b, fig 8).
84. Steatite, yellow enamelled. imitation hieroglyphs, on back two palm branches over elytra of beetle (Pl cciv b, fig. 9)
- 85 Steatite, in a gold mount: name and titles of Khyan Found on the top of the inner city wall at the north end of trench 3 (Pl cciv b, fig 16)
- 86 Diorite curious spiral pattern, probably local manufacture, picked up on the surface; perhaps of this period (Pl cciv b, fig. 20)
- 87 Steatite. lotus flower, ♂ in an oval, and uraeus Picked up on surface of ground, but probably belongs to this period (Pl cciv b, fig 23)
- 88 Steatite a bee between two crowns of Lower Egypt. Picked up on surface, but probably of this period (Pl cciv b, fig. 26)
89. Diorite. a winged figure between two crowns of Lower Egypt Picked up on surface, but probably of this period (Pl cciv b, fig 27)
90. Steatite, mounted in a bronze ring symmetrical ornament (Plate ccv a, fig. 1)
91. Steatite. a crocodile above two uraei (Pl ccv a, fig 2).
92. Steatite a sphinx and uraeus (Pl ccv a, fig 3)
93. Steatite a uraeus with symmetrical arrangement of hieroglyphs (Pl ccv a, fig 4\*).
- 94 Steatite O, , with a *bennu*-bird and uraeus (Pl. ccv a, fig. 5)
- 95 Steatite symmetrical arrangement of   and other signs (Pl ccv a, fig. 6)
- 96 Steatite, half only, the head of the beetle coloured red, the elytra and base blue. some lost characters in an oval surrounded by ♂ and ♀ (Pl. ccv a, fig 7).
- 97-99. Three steatite scarabs in the hoard of ornaments fig. 288, *ante* p 103.
100. Steatite. symmetrical pattern (Pl. ccvi, fig 1).
101. Steatite, symmetrical pattern with uraei, etc Back chipped (Pl. ccvi, fig 2)
- 102 Steatite: three columns of imitation hieroglyphs (Pl ccvi, fig 3)
103. Steatite: inscribed   (Pl. ccvi, fig. 4).
104. Ivory scaraboid, three figures. Perhaps of later date (Pl ccvi, fig. 5).
- 105 White (once green) enamelled an animal walking, in front ♀ (Pl. ccvi, fig 6).
- 106 Green enamelled. uraeus and fig. of *Maat*, below  (Pl ccvi, fig. 7)
- 107 Steatite, roughly made (probably local work) ♂ between two unintelligible figures (Pl. ccvi, fig. 8).

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\* This illustration has been accidentally inverted.


108. Steatite · column of conventional signs flanked with lotus flowers (Pl. ccvi, fig. 9).



109. Steatite · symmetrical pattern of  and other conventional symbols (Pl ccvi, fig. 10).

110. Green enamel · man walking, a uraeus below, above a serpent. Probably of later date than the stratum (Pl. ccvi, fig 11).




111. Basalt, scaraboid · a man and an animal roughly cut (Pl ccvi, fig. 12).


112. Basalt · obscure figures upon it, roughly cut (Pl ccvi, fig. 13)



113 Steatite , a scarabaeus above (Pl ccvi, fig 14).


114. Steatite · crown of Lower Egypt  and  arranged in symmetrical pattern (Pl ccvi, fig. 15)

115 Steatite · knotwork. Found in waste earth (Pl ccvi, fig 16).

116. Steatite · symmetrical device of    (Pl. ccvi, fig. 17)

117 Steatite · flat back, division of elytra not marked · On base  surrounded by spirals (Pl ccvi, fig 18).

118 Steatite · back broken,   within spirals (Pl ccvi, fig 19).

119 Steatite · symmetrical pattern of  and concentric circles, inside a hatched border (Pl ccvi, fig 20)

120. Green enamelled, symmetrical pattern (Pl. ccvi, fig 21)

121. Steatite, has been coloured green · a black line painted down division of elytra. Hieroglyphic characters within spirals (Pl ccvi, fig. 22).


122 Green enamelled, a crescent and wheel (Pl ccvi, fig 23)

123 Steatite, grey colour, head and sides picked out in green, conventional hieroglyphs within spirals (Pl ccvi, fig 24)

124. Steatite, with iridescent glaze · hawk wearing the crown of Lower Egypt, an oval with conventional hieroglyphs (Pl ccvi, fig. 25) Found with an infant interment in III 16

125 Steatite, margin on both sides surrounded with shaded line, conventional hieroglyphs in oval (Pl ccvi, fig. 26)

126 Amethyst, without device, found associated with no 125

127. Steatite, oval disc · on one side an oval containing conventional hieroglyphs between two figures, on the other  in an oval surrounded by groups of concentric circles (Pl. ccvi, fig. 27) The edge is coloured dark grey. The pattern on the reverse side has several irregularities


128. Green enamelled · a spiral pattern (Pl ccvi, fig 28).

129. Dark limestone, mounted in gold, a spiral pattern (Pl ccvi, fig 29). Nos. 127-129 were found together in III 17.


130. Steatite, coloured yellow. Elytra of beetle not marked · Conventional hieroglyphs (Pl. ccvi, fig 30).



131 Black stone, column of conventional hieroglyphs (Pl. ccvi, fig 31).


132 Steatite, highly polished, symmetrical pattern inside a marginal line which is almost effaced (Pl. ccvi, fig. 32)



133. Cyanus. oval scaraboid with  and the crown of Lower Egypt (Pl. ccvi, fig. 33).



134. Steatite sam sign, crown of Lower Egypt, etc. (Pl. ccvi, fig. 34).


135. Steatite  and crown of Lower Egypt in symmetrical pattern. Found in waste earth, but probably of this period (Pl. ccvi, fig. 35).

136. Steatite: a rosette of six leaves instead of the beetle markings on the back; on the base  four times with  (Pl. ccvi, fig. 36)




137 Steatite broken fragment with  and other signs (Pl. ccvi, fig. 37).


138. Steatite picked up on surface, but probably of this period. Symmetrical arrangement of  and  (Pl. ccvi, fig. 38)


139. Steatite above , below four  (Pl. ccvi, fig. 39).

140. Steatite three S curves with spiral terminations and two  symmetrically arranged (Pl. ccvi, fig. 40).

141 Steatite, a black line painted on division of elytra. Base chipped, but evidently has borne a symmetrical pattern of the usual sort (Pl. ccvi, fig. 41).

142 Green enamelled group of conventional hieroglyphs, , , , and two uraei, inside a shaded border (Pl. ccvi, fig. 42)

143 Steatite, traces of yellow colour upon it: figure with sceptre, and  (Pl. ccvi, fig. 43).

144 Steatite, figure between two palm branches, in front  Found in waste earth, but probably of this Period (Pl. ccvi, fig. 44).

145 Steatite, traces of light green enamel in the hollows Two palm-leaves on the elytra of the beetle On the base an ibex with the usual conventional hieroglyphs found in scarabs of the Hyksos Period (Pl. ccvi, fig. 45)

146 A scarab differing from the last in certain slight details only (Pl. ccvi, fig. 46)

147 Steatite various conventional hieroglyphs (Pl. ccvi, fig. 47).

148. Green enamelled, simple guilloche pattern (Pl. ccvi, fig. 48).



149 Steatite two hares (?) back to back, their tails crossed. From waste earth, but probably belonging to this period (Pl. ccvi, fig. 20).

150-152. Scarabs in basalt, uninscribed

153. Steatite, with S and C curves (Pl. ccvi, fig. 49)

154 Steatite, with symmetrical pattern of conventional hieroglyphs (Pl. ccvi, fig. 50)

155 Steatite, with symmetrical pattern of conventional hieroglyphs (Pl. ccvi, fig. 51)

156. Bluish green enamelled, oval disc (half broken away); on one side , on the other  (?) (Pl. ccvi, fig. 52).

157. Bluish green enamelled, from same place as last; figure of Horus holding sceptre, and uraeus (Pl. ccvi, fig. 53).

158. Cyanus · conventional hieroglyphs (Pl. ccvi, fig. 54)


159. Steatite spiral of two lotus plants, and a bird (Pl. ccvi, fig. 57).

160. Steatite figure holding lotus plant; a rude local imitation (Pl. ccvi, fig. 58).

161. Steatite inscribed  (Pl. ccvii, fig. 1)

162. Steatite · a duplicate of the last (Pl. ccvii, fig. 2)

163. Green enamelled, a sphinx instead of the beetle on base a uraeus and two indefinite marks (Pl. ccvi, fig. 55)

164. Diorite. Beetle between two , geometrical pattern below. Probably local work (Pl. ccvi, fig. 56).

165. Steatite · spiral device. Picked up on surface of the ground, but probably originally of this period (Pl. ccvii, fig. 3)


166. Limestone, throne-name of Senwosret I, with conventional signs. Half broken away (Pl. ccvii, fig. 4)

167. Steatite: bird wearing the crown of Upper Egypt and conventional signs (Pl. ccvii, fig. 5)

168. Steatite · ornamental pattern. Found under the foundations of the brick structure at the north end of III a 27, 28 (Pl. ccvii, fig. 7).

169. Black stone in a gold mount: hieroglyphic inscriptions inside ring of spirals. From same place (Pl. ccvii, fig. 6)

170. A hard green crystalline stone, bearing the *sam* sign roughly scratched. From same place (Pl. ccvii, fig. 8).

171. Steatite symmetrical pattern of signs , from waste earth, but probably belonging to this stratum (Pl. ccvii, fig. 9)

172. Serpentine, cubical block, on one side a winged sphinx, on the other a scorpion. Rude, probably local work (Pl. ccvii, fig. 10).

173. Stone resembling green marble, inscribed on three sides with a cow, a scorpion, and figure of Horus (Pl. ccvii, fig. 11)

## B. EIGHTEENTH DYNASTY SCARABS

174-180. Seven scarabs from tomb 56 shewn in Pl. lxxx.

181. Steatite, oval disc on one face a scarabaeus between two crocodiles, on the other a palm tree between two figures, one crocodile-headed, the other hawk-headed. Picked up on surface of ground, but apparently of this period (Pl. ccii a, fig. 8).

182. Two scarabs, green enamelled, bearing the throne-name of Amen-Hotep III, found with a pile of beads, a head of Sebek enamelled yellow and blue, and two

cylinders. The larger of the scarabs and the other objects specified are shown in Pl. ccii b, figs 1, 2, 4, 5.

183. Jade scaraboid, half only, with hinder part of an animal's figure. From the same group as the preceding (Pl. ccii b, fig. 3).

184. Large green enamelled scarab bearing the cartouches of Amen-Hotep III and Queen Thii (fig. 454).

185. Blue enamelled: a kneeling figure.

186. Green enamelled: device uncertain. Nos. 185, 186 were found with the large scarab of Amen-Hotep and Thii, and also are represented in fig. 454. They were all in a room on top of the inner city wall, at the south end of trench 28.

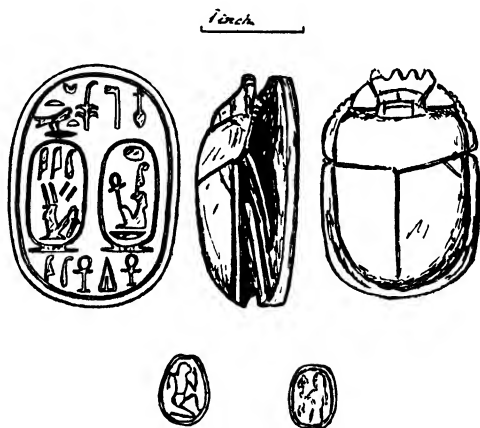




FIG. 454 — SCARAB OF AMEN-HOTEP III AND THII

187. Green enamelled: fragment of a scarab apparently inscribed with the name of *Amen*. Picked up on the surface, but probably belonging to this period.

188. Green enamelled: fragment of a scarab, the device all broken away except O. Picked up on the surface, but probably belonging to this period.

189. Steatite, inscribed  (Pl. cciv b, fig. 6).

190. Steatite inscribed  Picked up on surface (Pl. cciv b, fig. 22).

191. Green enamelled: uraeus and other figures, apparently *temp.* Amen-Hotep III, but picked up on surface (Pl. cciv b, fig. 24).

192. Green enamelled: a fragment of the well-known "marriage scarab" of Amen-Hotep III. The surviving portion is represented by shading (fig. 455), the

inscription is completed from perfect specimens. About twenty copies of this scarab have been found in Egypt: this is the first that has come to light outside the country. The specimen is covered on the back with a rich olive-green enamel. The base is yellow, and the letters have been filled in with green, but the colouring-matter has come out of most of the characters. Under the legs of the beetle is the throne-name of the king

193. Steatite, an oval on the back outlined in olive-green and coloured red · on the base *Amen* and other signs (Pl. ccv a, fig. 11).



194. Green enamelled: cartouche of Amen-Hotep III with  (Pl. ccva, fig. 12).







FIG. 455 — "MARRIAGE SCARAB" OF AMEN-HOTEP III

195. Green enamelled · square disc with name of *Amen* on one side, and on the other . From waste earth, but probably of this period (Pl. ccv a, fig. 22).

196 Bluish green enamelled · cartouche of Thutmose III flanked by *maat* feathers and uraei (Pl. ccvii, fig. 11 a).

197 Bluish green enamelled large triangular device with symmetrical arrangement of hieroglyphs. Found together with the preceding (Pl. ccvii a, fig. 12)

198. Steatite back of beetle plain: symmetrical pattern of  and , another device above (Pl. ccvii, fig. 13)


199. Steatite · symmetrical pattern of  and . Found along with the preceding (Pl. ccvii, fig. 14).

200 Steatite: cartouche of Thutmose III between various symbols. Found along with the preceding (Pl. ccvii, fig. 15).


201 Green enamelled: rudely made scarab, the base broken away. Style of Amen-Hotep III (Pl. ccvii, fig. 16). Found along with the preceding. These were on the top of the inner city wall at the south end of trench 28. Other Egyptian objects were found here, such as specimens of the eye-amulet, a small fragment of a cyanus bowl, as well as the two large scarabs of Amen-Hotep III figured above.


202 Green enamelled: rudely made scarab bearing a bird and a sistrum (Pl. ccvii, fig. 17).

203. Steatite: oval scaraboid, with throne-name of Amen-Hotep III (Pl. ccvii, fig. 18).


204 Green enamelled: name of Thutmose III with . The line on the back of the beetle filled in with white enamel (Pl. ccvii, fig. 19).

205. Green enamelled: from debris of about 1500 B.C.; miscellaneous signs; rude local work (Pl. ccvii, fig. 20).

206. Green enamelled: inscribed . Type of Amen-Hotep III (Pl. ccvii, fig. 21).

207. Green enamelled oval disc, half broken away. On one side throne-name of Thutmose III and , on the other a geometrical ornament (Pl. ccvii, fig. 22).

208. Green enamelled: cartouche of Thutmose III and uraeus (Pl. ccvii, fig. 23).

209. Green enamelled: rude local work. Inscribed  (Pl. ccvii, fig. 24).


210. Steatite: name and titles of Thutmose III (Pl. ccvii, fig. 25).

211. Green enamelled: temp. Amen-Hotep III. An animal (Pl. ccvii, fig. 26).


212 Bluish limestone: name of Thutmose III and other signs (Pl. ccvii, fig. 27).

213 Green enamelled: name of Thutmose III; the rest of the design chipped away. This was found with the last, west of the Water-passage: with them was a plain crystal scarab (Pl. ccvii, fig. 28).

214 Fragment of a large scarab of Amen-Hotep III (Pl. ccvii, fig. 31).

215 Green enamelled: inscribed  (Pl. ccvii, fig. 29).

216. Green enamelled: fragment with uraeus (Pl. ccvii, fig. 32).

217. Green enamelled: seal, inscribed  | temp. Amen-Hotep III (Pl. ccvii, fig. 30).

218. Cyanus: on each side cartouche of Thutmose III, on the one side with two uraei, on the other with an animal (Pl. ccvii, fig. 33).



### *Third Semitic Period*

219-224a Seven scarabs from tomb 252 shewn in Pl. cxxi.

225. Diorite: a lioness standing on a crocodile. In front a uraeus, nearly all broken away (Pl. ccii, fig. 9).



226. Amethyst: small fragment only, bearing two circles with dots at the centres (Pl. ccii *a*, fig. 11).


227. Steatite: two  flanking a tree; below  (Pl. ccii *b*, fig. 6)

228. Green enamelled: on the rounded back two *maat* feathers, on the base the name of *Amen* (Pl. ccii *b*, fig. 6 *a*).

229. Steatite: plain linear device. Found in the east limestone between the two city walls north of the High Place (Pl. ccii *b*, fig. 7).

230. Green enamelled. broken and device unintelligible (Pl. cciii *a*, fig. 5).

231. White (once green) enamelled: geometrical device; found in Third Semitic stratum, but probably originally belonging to Second (Pl. cciii *a*, fig. 8).


232. Steatite: winged sceptre, egg, lioness, and  (Pl. cciii *a*, fig. 9).


233. Jasper: scaraboid of rude local work, bearing a deer and two indefinite figures (Pl. cciii *a*, fig. 10).


234. Blue enamelled: name of *Amen*.

235. Diorite scaraboid: a fish (Pl. cciii *b*, fig. 7).


236. Ivory: a divinity with worshipper, the latter partly broken away. Flying scarabaeus above. From the cistern near the High Place which was full of bones (Pl. cciii *b*, fig. 8)

237. Blue enamelled scaraboid. on one side two lions, on the other  and name of *Amen* (Pl. cciv *a*, fig. 4).

238. Steatite: uraeus,  in a ring, and other characters (Pl. cciv *b*, fig. 10)

239. Steatite: seated figure and uraeus, below  (Pl. cciv *b*, fig. 11)



240. Steatite, green enamelled. a bird on a lotus branch (Pl. cciv *b*, fig. 12)

241. Blue enamelled.  and other devices; rude local imitation (Pl. cciv *b*, fig. 13)

242. Steatite, yellow enamelled. symmetrical pattern of hieroglyphs (Pl. cciv *b*, fig. 14).

[The five foregoing, though found in the Third Semitic stratum, probably belong properly to the Second.]

243. Soft limestone: scaraboid of rude local manufacture, half broken away; figure of an animal (Pl. cciv *b*, fig. 15)

244. Green enamelled: a seated figure, behind it  (?), below  (?). Picked up on surface, but probably of this period (Pl. cciv *b*, fig. 21).















245. Steatite: three S curves, one in an oval. Found in Third Semitic debris, but no doubt properly of Second (Pl. ccv *a*, fig. 8).





246. Steatite, in gold mount: cartouche of Senwosret I, surrounded by various symbols. Found in Third Semitic, but properly belonging to Second (Pl. ccv *a*, fig. 9).

247. Red enamelled. a duck sleeping with head turned back, takes the place of the beetle. On base a sistrum between two uraei (Pl. ccv *a*, fig. 10).




248. Steatite, a charioteer: above a worshipper before a divinity (Pl. ccv *a*, fig. 13).















249. Green enamelled: four circles: probably *temp.* Amen-Hotep III (Pl. ccv *a*, fig. 14).

- 250 Steatite · figure of Thoth and uraeus (Pl. ccvii, fig. 34).  
 251 Jade: figure of a sitting lion  
 252. Cyanus. half only; device not decipherable.  
 253 Green enamel: fine scarab of Amen-Hotep III with his throne-name upon it (Pl. ccvii, fig. 39)  
 254 Green enamel *Amen* and other signs (Pl. ccvii, fig. 35)  
 255. Steatite · cavities for enamel or inlays on the back of the beetle, on the base the *sam* sign flanked by   (Pl. ccvii, fig. 36).  
 256. Green enamelled · half only; a beading round edge instead of the legs of the beetle. On base, a crouching animal (Pl. ccvii, fig. 37).  
 257 Grey stone.  between two  (Pl. ccvii, fig. 40).  
 258. Steatite · a hawk between two uraei (Pl. ccvii, fig. 41).  
 259. Steatite  between two ; flying scarabaeus above (Pl. ccvii, fig. 38).  
 260 Steatite sphinx crowned; *Maat* in front, winged figure behind, below a flying scarabaeus (Pl. ccvii, fig. 42).  
 261. Steatite. rectangular disc, well cut, on one side a lion and lotus plant, on the other a sphinx Found in waste earth, but probably either of this or the end of the preceding period (Pl. ccvii, fig. 49)  
 262. Green enamel scaraboid, chipped, bearing figure of a man (Pl. ccvii, fig. 43)  
 263 Steatite: has been covered with a highly iridescent glaze. Found in the silt covering the mouth of the Water-passage. A knot, surrounded by four uraei (Pl. ccvii, fig. 45).  
 264 Basalt Syrian imitation of a twelfth-dynasty scarab with conventional signs (Pl. ccvii, fig. 1).  
 265 Steatite, traces of red colour upon it. Name and titles of Ramessu VIII (Pl. ccviii, fig. 2).  
 266 Serpentine scaraboid · rude figures (Pl. ccvii, fig. 48).  
 267 Green enamelled · inscribed   (?) From silt filling the Water-passage (Pl. ccvii, fig. 46)  
 268 Light arsenical green; found in waste earth, but probably of this period. Very rudely drawn hieroglyphs   ; no doubt local work (Pl. ccviii, fig. 3).  
 269. Green enamelled, cartouche of Ramessu II and flying scarab. Broken Found in silt above Water-passage (Pl. ccviii, fig. 4)  
 270 Granite · throne-name of Ramessu II From same place (Pl. ccviii, fig. 5).  
 271. Basalt throne-name of Ramessu II (Pl. ccvii, fig. 44).  
 272 Green enamelled · inscribed    (throne-name of *Saa-ka-nekht-Kheperu-Ra*, the thirteenth king of the XVIIIth Dynasty) (Pl. ccvii, fig. 50).  
 273 Steatite · Horus and another figure holding sceptre: above, a uraeus (Pl. ccviii, fig. 6)

274. Steatite: inscribed  (Pl ccviii, fig. 7)
275. Red stone, flat scaraboid, device not decipherable (Pl ccvii, fig. 47)
276. Steatite: style of Thutmose III, with name of *Unas*. Found, however, in débris of just the end of the Third Semitic Period (Pl. ccviii, fig. 8)
277. Amethyst, much broken, design of spirals (Pl. ccviii, fig. 10)
278. Steatite: ornamental interlacing pattern (Pl. ccviii, fig. 11)
279. Steatite: throne-name of Thutmose III and other signs (Pl ccviii, fig. 9).
280. Steatite: the back glazed yellow, the circle of pupil of eye green, and traces of green in the dependent spiral. A lotus plant (Pl. ccviii, fig. 12).
281. Steatite: symmetrical ornament of S curves, etc (Pl ccviii, fig. 13). These two scarabs and a basalt scarab without device were found near the ivory pectoral of Merneptah, and probably belong to the same period
282. Blue enamelled; rectangular disc, with on each side the throne-name of Thutmose III and a sphinx, in the one walking, and the other seated (Pl ccviii, fig. 14).
283. Black composition, much worn a figure (Pl ccviii, fig. 15).
284. Steatite, yellow colour: conventional signs divided by two diagonal lines (Pl ccviii, fig. 16)
285. Steatite: crown of Lower Egypt  and two  (Pl ccviii, fig. 17)
286. Green enamelled, style of Amen-Hotep III: partly broken inscribed  . . . (Pl. ccviii, fig. 18).
287. Black stone, a hawk between two uraci (Pl. ccviii, fig. 19).


#### Fourth Semitic Period

288. Scarab found in cave 8 I (Pl xviii, fig. 11)
- 289-294. Six scarabs from the Philistine graves (Vol. I, pp. 293, 296).
- 295, 296. Two scarabs from tomb 82 (Vol. I, p. 334).
- 297-306. Nine scarabs from tomb 96 (Pl. xc)
- 307, 308. Two scarabs from tomb 144 (Pl. cii, figs. 26, 27. See also nos. 335, 336 below)
309. Bone: flat dome-shaped scaraboid with geometrical pattern; type characteristic of XXVIth Dynasty (Pl. cciii a, fig. 11).
310. Slate: faint scratched letters, apparently .
311. Steatite: figure holding a sceptre in front  (Pl. cciii a, fig. 12).
312. Green enamelled inscription  possibly Piankhi II, whose date would fairly well suit the place where the scarab was found (Pl. cciii a, fig. 13).
313. Basalt: rude scaraboid of local manufacture with three figures (Pl. cciii a, fig. 14).

314. Basalt: rude scaraboid of local manufacture, representing a man between two ostriches (Pl. cciii *a*, fig. 15).
315. Limestone: geometrical pattern (Pl. cciii *a*, fig. 16).
316. White enamelled scaraboid: two figures bearing whips, and a uraeus (Pl. cciii *a*, fig. 17).
317. Diorite: no device. This scarab is in a gold mount. Found in a cistern in V 21 (Pl. cciii *a*, fig. 20).
318. Limestone: a honess. Rude local work (Pl. cciii *b*, fig. 10).
319. Steatite: lion and crocodile (Pl. cciv *a*, fig. 5).
320. Green enamelled: figure of Bes (?) (Pl. cciv *a*, fig. 6).
321. Limestone: rude scaraboid of local manufacture with unintelligible device (Pl. cciv *a*, fig. 7).
322. Steatite: two figures, one wearing the crown of Upper Egypt and carrying a sceptre. In the margin, symmetrical pattern of  and . On the back of the scarab a lotus flower (Pl. cciv *b*, fig. 17).
323. Steatite: a figure on the back of a long-necked animal. The back of the scarab broken away (Pl. cciv *b*, fig. 18).
324. Basalt: rude local work: a wolf (?) attacking an ibex (see above, fig. 438).
325. Steatite: rude representation of name of *Amen* and other signs. Picked up on surface (Pl. cciv *b*, fig. 25).
326. Yellow enamelled.   || (Pl. ccv *a*, fig. 15).
327. Green enamelled: a walking animal (Pl. ccv *a*, fig. 16).
328. Green enamelled: symmetrical pattern of  and  (Pl. ccv *a*, fig. 17).
329. Ivory, pattern of type characteristic of XXVIth Dynasty (Pl. ccv *a*, fig. 18).
330. Steatite: peculiar ornamental device (a burning altar?), most likely rude local workmanship. From waste earth, but probably of this period (Pl. ccv *a*, fig. 21).
331. Limestone scaraboid, rude local work. two figures and stars upon it (Pl. ccviii, fig. 20).
332. Diorite: figure of an animal.
333. Granite. throne-name of Ramesu I (Pl. ccviii, fig. 21).
334. Plain scaraboid or scarab-shaped bead, enamelled all over with wavy lines, green, white, blue, and yellow, apparently in imitation of the markings of an agate.
335. Rough limestone scarab found in tomb no. 144; ten circular holes in base (Pl. ccviii, fig. 22).
336. Basalt. also found in tomb no. 144, inscribed    (Pl. ccviii, fig. 23).
337. Steatite: with flying scarabaeus, the sacred eyes, crown of Lower Egypt,  and  symmetrically arranged an early scarab, but found in V 28 (Pl. ccviii, fig. 24).
338. Steatite: symmetrical pattern of   and . Found associated with the last, though, like it, belonging to an earlier period (Pl. ccviii, fig. 25).



339. Carnelian, picked up on surface; probably of this period. Simple geometrical pattern (two lozenges) (Pl. ccviii, fig. 26).



340. Agate: rudely scratched figure of a man (Pl. ccviii, fig. 28).



341. Green enamelled: inscribed  (Pl. ccviii, fig. 27).

342. Cyanus: figure (Pl. ccviii, fig. 29).


343. Steatite: man with hands upraised in adoration before sphinx: other symbols in the field (Pl. ccviii, fig. 30).

344. Green enamelled: symmetrical arrangement of  and  (Pl. ccviii, fig. 31).

345. Green enamelled: lotus flower, uraeus,  and  (Pl. ccviii, fig. 32).


346. Steatite: rectangular disc, on one side name of Thutmose III, on the other  between two  (Pl. ccviii, fig. 33).

347. Steatite: continuous chain of S curves in three columns (Pl. ccviii, fig. 35).

348. Light green stone: kneeling man with his hands bound behind, in front,  (Pl. ccviii, fig. 34).

349. Grey basaltic stone: two animals (Pl. ccviii, fig. 36).




350. Steatite: kneeling figure (Pl. ccviii, fig. 37).


351. Steatite, with bluish-grey glaze: kneeling figure; below  (Pl. ccviii, fig. 39).


352. Diorite: three figures. Found in waste earth, but probably rude local work of this period (Pl. ccviii, fig. 41).

353. Basalt: a man holding a club (?) upright, and two animals (Pl. ccviii, fig. 46).


354. Green enamelled: two figures, between them a sceptre, a crocodile beneath (Pl. ccviii, fig. 47).

355. Paste, much corroded and friable: oval containing    with other signs. Found in tomb 145 with two others. See Vol I, p. 355 (Pl. ccviii, fig. 42).

356. Cyanus: inscribed  (Pl. ccviii, fig. 38).

357. Slate, much disintegrated: throne-name of Thutmose III with illegible signs () on each side (Pl. ccviii, fig. 43).

358. Basalt: limestone scaraboid seal, rude local work (Pl. ccviii, fig. 44).

359. Green enamelled: on back the *wadjet* eye instead of the beetle, on base a seated lion and  (Pl. ccviii, fig. 45).

360. Steatite: scaraboid of style of XXVth Dynasty (Pl. ccviii, fig. 40).



361. Green enamel: small rude scarab, the back broken. On base a flying scarabaeus (?) (Pl. ccviii, fig. 48).

362. Agate: scaraboid of style of XXVth Dynasty (Pl. ccviii, fig. 54).


363. Hard limestone: rudely cut scarab with seated figure on base. Probably local work (Pl. ccviii, fig. 55).

364. Steatite: badly made and distorted, probably local work. A charioteer

[the drawing of the design is made from an *impression* of the scarab, and is therefore reversed] (Pl. ccviii, fig. 51)

- 365 Green enamelled : sistrum and uraeus. Probably local work (Pl. ccviii, fig. 49).  
 366. Green enamelled · unintelligible signs. Probably local work (Pl. ccviii, fig. 52)  
 367. Steatite, Horus (?) and crocodile: below  (Pl. ccviii, fig. 58)  
 368 Steatite ornamental interlacing pattern; found in Fourth Semitic Stratum, but properly belonging to a much earlier period (Pl. ccix, fig. 1).  
 369 Steatite: set in a bronze ring. Similar to the last, and from the same place. The legs of the beetle are peculiarly treated (Pl. ccix, fig. 2)  
 370 Steatite: lotus plant treated spirally (Pl. ccviii, fig. 50)  
 371. Steatite · symmetrical pattern (Pl. ccviii, fig. 56)  
 372 Jasper · a man between two ostriches (Pl. ccviii, fig. 57).  
 373. Steatite: rudely cut figure (Pl. ccix, fig. 3).  
 374. Glass: flying scarabaeus with ornamental figures above and below (Pl. ccix, fig. 4)  
 375 Limestone: two men. Rude local work (Pl. ccix, fig. 5).  
 376 Steatite. late poor imitation of a "nub" scarab (Pl. ccix, fig. 6).  
 377 Cyanus scaraboid · rosette (Pl. ccix, fig. 7)  
 378. Steatite  surrounded by spirals (Pl. ccix, fig. 8)  
 379 Steatite · symmetrical pattern (Pl. ccix, fig. 9).  
 380. Green enamelled · bead in shape of a scarab. No device on base (Pl. ccviii, fig. 53)  
 381 Greyish-green stone · unintelligible device. This scaraboid is unfinished, not having received its final polishing (Pl. ccviii, fig. 59).

### *Hellenistic Period*

382. Green enamelled: a crocodile and another figure. This scarab has been distorted by fire (Pl. cciii a, fig. 18)  
 383 Steatite: rudely scratched representation of two birds and a sphinx (Pl. cciv b, fig. 19).  
 384 Cyanus · oval scaraboid with winged disc (Pl. ccv a, fig. 19).  
 385 Cyanus · scarab inscribed  half only  
 386 Green enamelled · a figure of Bes on under surface. Found in the surface stratum, but of the style of Amen-Hotep III  
 387 White enamelled, with a reddish tinge · half of a scarab, on the surviving portion the lower part of a seated animal  
 388 Cyanus throne-name of Amen-Hotep III with an obelisk (Pl. ccix, fig. 10).  
 389. Green enamelled. two figures; very rude local work (Pl. ccix, fig. 11).  
 390 A large scarab about  $3\frac{1}{2}$ " in length, cut out of a nodule of soft limestone and broken into many fragments, several of which were missing. The base quite plain.  
 391 Limestone · a chariot (Pl. ccix, fig. 12)

392. Bone, much corroded · figure of *Maat*, with a man standing in front Found in a cistern in **VI 30** (Pl. ccix, fig. 13)

393. Green enamelled · an animal with a triangle over its back (? meant for a horse and rider) (Pl. ccix, fig. 14).

394. Steatite with yellow glaze: oval scaraboid, being the throne-name of Thutmose III (Pl. ccix, fig. 15).

395. Limestone: rude local work; a lion (Pl. ccix, fig. 16).

### *Roman and Byzantine Periods*

The two following scarabs were found in tombs of this period, though no doubt they properly belong to an older archaeological level

396 Scarab with cartouches of Thutmose III, from tomb **196** (Pl. cxviii, fig. 3).

397. Green stone; roughly made a man with imitation hieroglyphs in front of him Found by the fellahin in a tomb near *Mughûret-et-Jâhah* that they rifled (Pl. ccix, fig. 17)

### E. IMPRESSIONS FROM SCARABS

Impressions from scarabs were found in large numbers on jar-handles from the Second and Third Semitic Periods, where they served as trade-marks to distinguish the works of the different potters. They were confined, as a rule, to the strata corresponding to those periods, though a few were found in later contexts, shewing that the scarab had passed as an heirloom, or had been discovered and adapted as a seal in a century later than its own. Such are the two seals found on jar-handles in the Hellenistic deposit in the cistern in cave **14 I** (Pl. xlv, figs. 14, 15), or Pl. ccix, fig. 72, which was found in **VI 13**. Less frequent, but of the same range in time, was the occurrence of scarab stamps on the top of weavers' weights; and of sealings on pieces of clay which had been attached to documents. A very large proportion, especially of the jar-handle stamps, could not be satisfactorily deciphered, owing to the disintegration of the pottery; those shewn in the plates are the residue that it was possible to make out, at least in part. It is hardly necessary to enumerate these in detail, it will be seen that they correspond in style with the commonest forms of scarabs found in the excavation. The following are the references to the illustrations of scarab sealings:

Pl. ccia, figs 1-5 (fig. 5 on a clay sealing).

Pl. ccib, figs 8-11.

Pl. ccia, figs 21-23.

Pl. ccib, figs 13-24 (figs. 16, 17 on weavers' weights, fig. 24 on a fragment of a jar-stopper).

- Pl. cciv *a*, figs 9-14 (fig. 12 on a *bullæ* of black pottery, with a hole for the string running through).  
 Pl. cciv *b*, figs. 28-30.  
 Pl. ccix, figs 18-83 (fig. 73 on a sealing covering a jar-stopper, figs 74-76 on weavers' weights, figs. 77-82 on clay sealings; fig. 83 a small bar of clay with two scarabs—figs 83 *a*, *b*—impressed upon it)


#### F. MISCELLANEOUS SEALS, ETC

A few seals have been included with the scarabs proper in the foregoing enumeration. The following are some additional examples:—


#### *Second Semitic Period*

1. Conical clay seal with conventional twelfth-dynasty hieroglyphs upon it (Pl. ccix, fig. 84)
2. Cyanus, rectangular disc, an animal figure on each side (Pl. ccix, fig. 85)
3. Fragment of a seal ring, green enamelled, bearing two ovals: design too fragmentary for decipherment (Pl. ccix, fig. 86)
4. Fragment of a seal-ring, green enamelled, bearing a figure of Horus above him, O (Pl. ccix, fig. 87)
5. Fragment of a purple-enamelled seal-ring with part of the cartouche of Amen-Hotep III (Pl. ccix, fig. 88).
6. Fragment of a ring in blue glass, with part of the cartouche of Ikhnaton (Pl. ccix, fig. 89)
- 6 *a* A sealing on black clay of a stamp bearing three figures, the central one apparently Chnum (p. 295, fig. 437, no. 1)

#### *Third Semitic Period*

7. Fragment of a clay seal with  impressed on it
8. Basalt cylinder from tomb 30, with hieroglyphic inscription, interpreted by Prof. Petrie, "The keeper of the horses, beloved of Set, Ara, having future life" (Vol. I, p. 312, fig. 163)

#### *Fourth Semitic Period*

9. Cyanus, figure of a sphinx. on the base two diagonal lines crossing (Pl. ccix, fig. 90)
10. Base of a statuette (?) in wood, blue enamelled, with  and other symbols on the under side (Pl. ccix, fig. 91)
11. Clay seal with mark of a cord upon it and part of an impression, probably from a cylinder. Found in waste earth (Pl. ccix, fig. 92)
- 11 *a*. Obscure seal with a seated figure holding something in its hand (fig. 437, no. 9).



## G. PERSONAL ADORNMENTS

Apart from the pendants and amulets, described below, and such of the objects enumerated in Chapter VI as may have been of Egyptian provenance, the only trouvaille of importance under this heading was the ivory pectoral with the cartouches of Merneptah (fig. 456). It has been already described (Vol. I, p. 15).

## H. AMULETS AND PENDANTS

A very large number of these came to light. Representative specimens are shewn in Pl. ccx, to which reference is made throughout this division of the subject.

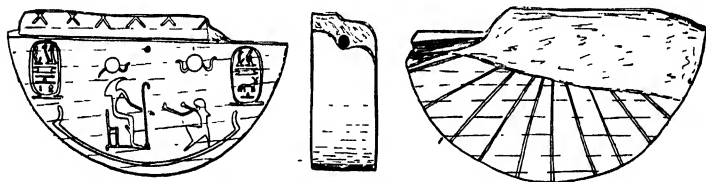


FIG. 456—IVORY PECTORAL OF MERNEPTAH

The commonest were the figures of *Bes*, which were, however, almost confined to the Fourth Semitic Period: a few, such as fig. 1 (which was found in the rubbish cast between the city walls, north of the High Place), fig. 6 (with a serrated pilaster running up the back); and fig. 10, belonged to the Third Semitic. The minute example fig. 8*a*, as well as the large specimen fig. 62, are Second Semitic. A mould in terra-cotta for casting representations of the face of this divinity was found in the excavation: this shews that such representations were made locally, and is a further scrap of evidence testifying to the activity of the Egyptian colony. This object is shewn in fig. 17.

The sacred *wadjet* eye, both right and left, was however almost, if not quite, as common. These had a much greater range, they were commonest in the Fourth Semitic, like the *Bes* amulets, but were found in the Second and Third Semitic strata as well, in considerable numbers. Most of them were green enamelled, with the eye and eyebrow often picked out in black, especially in the latest examples (as in the small specimen fig. 31): but the very handsome example fig. 32, which bore the cartouches of Amen-Hotep III, and was deposited in débris of his period, was enamelled a purplish-blue colour; and the example shewn in fig. 28 from IV 29 was in carnelian. Fig. 22 was found in the courtyard in front of the supposed temple

on the Eastern Hill. The most curious examples are fig. 33, which is a fragment of the leg of a green-enamelled statuette, with an eye painted on both sides, found in débris of the period of Amen-Hotep III, and not far from fig. 32, above the inner city wall on the S. side, and the long narrow fig. 35, which comes from **V a 28**.

Other figures of divinities are the Sekhet (fig. 12) · the Chnum (fig. 16) from **III a 28**: the Isis with in front a minute figure of the infant Horus (fig. 18) from the same trench and stratum—two or three small figures of Isis and Horus, the latter seated on his mother's knees, were found the Ptah (fig. 19) from **IV 19**, with an olive-green, coloured enamel upon it the four heads of Isis with a large pectoral ornament, figs 48 from **V 30**, 58, 59 from **V 29** and **V 30** respectively, and 56 from waste earth the Taurt (fig. 60), from the beginning of the Fourth Semitic Period: a curious figure, perhaps Bes, but rather different in character from other representations of this divinity, from early Fourth Semitic débris (fig. 61): an indefinite seated figure (fig. 66) from **V 30**; three others which I cannot identify—fig. 68, which I have not succeeded in tracing in the Journal kept at the excavation, fig. 69 from **V a 28**, and fig. 77 from the rock in trench 3. Fig. 70, from **V 28**, is another figure of Sekhet, and fig. 79 from **V 12** a representation of Isis. In this last the wig is picked out in black, as is sometimes the case in the later examples. Except when otherwise stated, all the above figures are enamelled in dark green, the perfect examples have all got a perforation or a loop for suspension. Fig. 39, from **VI 28**, is the head of a figure with a disc and uraeus. Fig. 63, with the crown of two feathers, came from the Second Semitic stratum.

Animal figures, symbolical of various deities, were also found, though not perhaps so frequently as the representations of the deities themselves. The seated jackal fig. 13, once green enamelled but now faded white, was found in **V 28**; compare fig. 55 from **V 19**. The rudely modelled fig. 14, from **VI 11**, is probably a cat, a cat on a pillar from the rock in the neighbourhood of the great central reservoir is shewn in fig. 78. The two cats illustrated on p. 8, *ante*, fig. 210, may be compared. An ape, green enamelled, is shewn in Pl. ccix, fig. 94 [**V 28**]. Fig. 15 is a sphinx, roughly cut from a piece of crystal, dating from the end of the Third Semitic Period. Two or three other representations of sphinxes, in carnelian or cyanus, were discovered, all belonging to about the same time. The uraeus shewn in fig. 37, from **V 28**, was found in the same place as fig. 13, fig. 38, which is in carnelian, is the head of a uraeus found with objects contemporary with Amen-Hotep III in trench 29, fig. 40 from **III a 28**. The lion-head with pectoral (fig. 57), a very fine amulet, came from the cistern in **VI 30**. In this example the U lines dividing the segments of the pectoral are yellow; the rest of the ornament is green. The representation of the two cynocephali guiding the solar bark, with a scarabaeus in low relief in the centre of the disc (fig. 76), came from the Third Semitic stratum.

Of the smaller amulets, one of the commonest was the disc, fig. 36. This specimen was found near the pile of beads described above (p. 110), and the period thus indicated—that of Amen-Hotep III, to which by far the greater number of Egyptian objects discovered at Gezer belonged—is that in which this particular amulet was the commonest.

The *dad* amulet, as represented in figs 41, 44, was also very frequent: these two with the looped oval discs, figs. 42, 43, and the lotus leaf fig. 45, were found in one hoard in V 18. Other examples of the lotus and its modifications are figs 46 (found by a peasant on the hillside, and therefore not referable to any special stratum), 47 [V 29], 50 (in carnelian, [VI 17]), 52 (in cyanus, [VI 3]), and 53 [III 28]. Fig 51, from III a 28—from the same place as the painted eye fig 33, and the *Chnum* amulet fig. 16—is a handsome specimen of the lotus-sceptre amulet, the top cylindrical part is blue enamelled, the rest green, save for a line of blue in the hollow between the central swelling and the bottom expansion. The heart amulet, as fig. 49, was much less common than any of the other varieties: this example, in jasper, was found in II 28. Another rare form, from V 28, is shewn in fig. 54. Fig 65 represents a handsome amulet in cyanus in the form of a table of offerings, from V 28: this was unique at Gezer. The oval disc fig. 72, flat on one side and convex on the other, was found

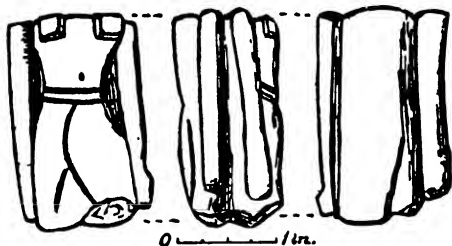


FIG 457—STATUETTE OF ISIS AND NEPHTHYS

with other objects contemporary with Amen-Hotep III at the S end of trench 26. The small pendant fig. 73 was from the same trench and stratum: so were the two fragments figs 74, 75, which evidently belonged either to the same or to a pair of ornamental objects, no other fragments of which were discovered.

Besides these amulets, there are represented on Pl. ccx the hawk-headed stopper of a canopic jar, in basalt (fig. 64) [Fourth Semitic, above the inner city wall, west of the South Gate]: the head of another hawk figure, in stone (fig. 64 a), a fragment of a bar of limestone on which a kneeling figure is cut (fig 67), found in the cistern at the N. end of VI 30; and a curious bead (fig 71) of glass of a green colour, very friable, bearing in relief a female figure between two sheaves [III a 28].

The green-enamelled double statuette of Isis and Nephthys shewn in fig. 457 was found in V 19. The upper and lower portions were lost. Another group of Isis and Nephthys, seated side by side, from V 18, is shewn in Pl. ccix, fig. 95.

A few other amulets are shewn in some of the plates of scarabs. The Sebek head (Pl. ccii, b, fig. 2) which is enamelled yellow and blue, was found with a hoard of beads and scarabs (which are illustrated on the same Plate) bearing the name of Amen-Hotep III. A couple of draughtsmen, a *dad* amulet, and a fragment of an eye ornament

of peculiar form are shewn in Pl. cciii *a*, figs. 25-28. Fig. 25 was found in II 20, fig. 26 in V 20, fig. 27 (which is in blue glass, with similar markings on both sides) in V 20, and fig. 28 in the cistern at the N. end of V 21.

#### I. OTHER FIGURES

There were found fragments of several figures, larger than those enumerated in the foregoing section. They were of bronze, ivory, stone,



FIG. 458.—BRONZE STATUETTE

and there was one most remarkable head of a statuette in cyanus. These are illustrated for the greater part on Pl. ccxi, and may be described as follows :—

##### *a. Bronze*

1 (fig. 458). Figure of a man walking,  $4\frac{1}{4}$ " high. He wears a skirt reaching mid-way between the knees and ankles, but the upper part of the body seems to be bare.

The right arm was stretched out horizontally from the elbow, and probably held a staff, but has been broken off: the left, hanging by the side, holds some indistinguishable object. On the head is a hollow cylindrical crown. There are tenons under the heels to fit into mortices in a stand. The figure has been gilt, the gold remaining to a little above the waist: pearls are set in the eye-sockets. Found in IV 28.

2 (Pl. ccxi, fig. 1). Figure of a seated man, of summary execution; arms outstretched, and each hand holding an indefinite object. Tenons provided for mortices in the seat and footrests. Height  $2\frac{1}{4}$ ".

3 (Pl. ccxi, fig. 2). Female figure, pregnant, left hand pressed on lower part of body; above the head and below the feet a knife-shaped projection. Height  $4\frac{1}{8}$ ". Found in IV 27.

4 (Pl. ccxi, fig. 3). Object similar to the last but of ruder execution. Height  $4\frac{1}{2}$ ". Found in Va 29.

5 (Pl. ccxi, fig. 4). Man walking; the left hand stretched out but broken, the right hand raised; on the head a cylindrical crown. Height  $2\frac{1}{8}$ ". Found in III 28.

6 (Pl. ccxi, fig. 5). Similar to no. 5; the left hand grasps a staff, which is preserved. Height 3". Found in IV 30.

7 (Pl. ccxi, fig. 6). Rude figure, arms broken off. Height 4". From V 28.

8 (Pl. ccxi, fig. 77). Undraped seated figure wearing the crown of Upper Egypt over a wig with lapels, one of which is broken away. Height  $3\frac{1}{4}$ ". Found in waste earth.

### *b. Ivory*

9, 10 (Pl. ccxi, figs. 8, 9). Two heads, probably belonging to chryselephantine statuettes. The first of these was found V 28. The second, which was discovered in V 16, measures  $3\frac{1}{8}$ " in height. It had been secured in position in the statue to which it belonged by a rivet passed through the neck, the hole for which was conspicuous. The back and top of the head, which of course had been meant to be concealed, were rough and unpolished. There were some small fragments broken off, which could be replaced, but the nose and one of the ears had been injured, and the missing portions of these were not forthcoming. The eyes are hollow and no doubt had received inlays. With this object were associated the ear of an alabaster figure, and a fragment of a spoon likewise in alabaster, represented in Pl. ccxi, figs. 10, 11.

### *c. Stone*

11 (Pl. ccxi, fig. 12). This was the head of a figure wearing the crown of Upper Egypt;  $4\frac{1}{8}$ " high. It was cut from a block of soft limestone, but was unfinished, part of the rough stone remaining at the back: possibly it broke in the sculptor's hands and so was abandoned. This was found near the rock at the north end of trench 10.

### *d. Cyannus*

12 (fig. 459). This marvellous little work of art was found at the N. end of V 27. It measures  $\frac{5}{8}$ " high. The expression of ferocity on the face is startlingly

lifelike, and there is a noticeable absence of the conventionality of normal Egyptian portraiture. There is the usual Egyptian wig, and a perforation in the top of the head seems to shew that a movable headdress had been at some time mortised to the figure. It is deplorable that no other fragments of this statuette came to light: though so small, the head was one of the most striking discoveries made at Gezer.

#### J. POTTERY AND FAÏENCE

Apart from ornamental faïence, Egyptian pottery did not influence that of Gezer to nearly the same extent as did the ceramics of the Aegean civilizations. One or two specimens of Egyptian vessels have already been referred to in the section on the work of the potter. We may here



FIG. 459.—HEAD OF A CYANUS STATUETTE

mention a fragment,  $7\frac{3}{8}$ " high, of an incense burner, found in V 30, (fig. 460). This has lost the base, and at the top the cup with probably an upper row of lotus leaves, and otherwise the object is much injured. Nearly all of the six pendent lotus leaves that surround the present top are wholly or partly broken away. The whole surface is covered with a cream-coloured wash, on which the coloured decoration was applied, and this, not being impervious to damp, has nearly all perished. Indeed, though the scheme of decoration is very simple, it needs very close study to make the pattern out. The colours used are black and a dull brownish red, the latter is represented in the diagram by dots. Black lines are used to divide the field into horizontal compartments, but above and below the band of fret-pattern in the middle a red line is added alongside each of the black lines. In the bands of triangles the colours alternate, but the red triangles are always edged with black. Apparently all the lotus leaves were ornamented with red chevrons, but only one of them preserves the decoration complete. A similar though rather more elaborately orna-

mented example was found at Megiddo, and is reproduced in colours in the report on that excavation

On Pl. cxi are shewn a number of specimens of green-enamelled faience, on which decorative patterns are traced, as a rule in brown lines. To judge by the number of specimens found, there must have been a very large quantity of ornamental vessels—chiefly saucers—of this description in use in Gezer.

Of these figs. 13, 14, 26, 28 are small ointment pots adorned with lotus and other patterns; another, from tomb 3, will be found in fig. 160, no 9 (Vol I, p 303). These for the greater part belong to the Third and Fourth Semitic Periods—especially the beginning of the latter but the tomb specimen is of course Second Semitic, fig 26 is Third Semitic, and fig 14 was found in VI 8. Fig 13 was of a white colour (as was also fig. 14), but probably it had faded from an original green. This specimen was broken into many small pieces, the drawing being a restoration. A similar vessel, but differently ornamented, is shewn in fig 16, which is from the Fourth Semitic stratum. In this the surface is covered with a shiny black slip, and the decoration is in sgraffito. In fig 19 [VI 16] the vessel is green enamelled the zigzag line is impressed, but, unlike the lines on the previous example, it has been traced before the application of the enamel. It is a sherd of a vessel of a globular shape, only part of the mouth and side of which has been preserved.

Another form of vase, cylindrical in shape, is shewn in fig 25, which is, however, restored from a small fragment, the rest of the vessel was not forthcoming. It came from the Fourth Semitic stratum.

Fig 23 is another fragment of a vase which has evidently borne a representation of the sacred eye. The vase with the cartouche of Ramessu II (*ante*, p 236) may also be recalled here.

The majority of the vessels in this ware are, however, saucers. Fig 17 [V 28] is a fragment of a saucer in the form of a cylindrical disc, the upper surface hollowed and the vertical edge ornamented in black. Fig 18 is a sherd of a saucer with heart-shaped ornament, from V 29. Figs 20, 21 are similar sherds with geometrical and lotus patterns respectively, also from the Fourth Semitic. Fig 22 is rather earlier, being from IV 8. Fig 24 is a restoration of a saucer from V 28. Fig 27, which has a peculiar type of ornament, is from V 29.

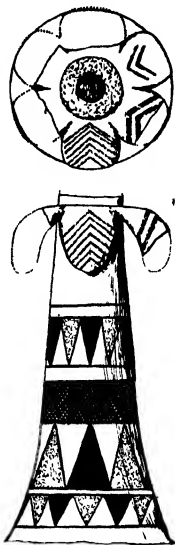


FIG 400—INCENSE BURNER

The handsomest Egyptian porcelain vessel, however, was found in  
VOL. II

fragments in the cistern in IV II, which it will be remembered had been used as an ashpit in the Persian or Early Hellenistic Period, and yielded a valuable series of pottery types of this period. This has already been described. It was found, when the cistern (which was of unusual size) was further examined, that underneath this rich layer lay a thick stratum of yellow earth—evidently decomposed brick. Apparently some adobe building had been pulled to pieces and thrown into the cistern. Several days' discouraging work was necessary to empty out this stuff, which, naturally, contained no antiquities. I was rewarded, however, by striking another rich layer at the bottom of the cistern. Fragments of three large alabaster vases, much broken but nearly complete, were found, as well as a grey-enamelled stopper, perforated, and bearing in white (faded from green) the cartouche of Ramessu II (Pl. ccix, fig. 97), and some fragments of painted and other pottery of the same date. There were also a number of fragments of jar-covers of stone, of the kind represented in Pl. cxc, fig. 18, and the small alabaster fragment Pl. ccix, fig. 98. The most striking part of the deposit, however, was the beautiful saucer shewn on Pl. ccv *b*. It is in many fragments, and only a few small scraps were recovered. The bottom was perfect, and enough coherent pieces remained to shew the curve and the chief decorative scheme of the sides. The vessel, when whole, was 2" high and 6 $\frac{3}{8}$ " across. It was made of a light porous porcelain, of a greyish-white colour; the designs were incised and inlaid with cyanus, whose delicate blue colour shews up effectively against the white background. In the Plate, fig. *a* represents the inner and outer elevations of the vessel. Fig. *b* shews the design on the under side, the vessel being turned bottom upwards. A simple rosette of twenty-seven radiating lines is surrounded by nineteen white ovals on a blue ground, around which again are a series of compartments alternately narrow and broad—the former containing a plant, the latter two animals. In one of the narrow compartments the cyanus has lost its colour and the design is barely decipherable. Around the bottom of the side runs a row of white lozenges on a blue ground: above that is a space which I have been obliged to leave blank, though it seems to have been decorated with a floral pattern, the traces of this were too faint and indefinite to permit me to make it out. Fig. *c* represents the inside of the bowl, turned bottom downwards. It was decorated simply with a rosette of thirty-nine rays—rather irregularly drawn, as I have endeavoured to shew it in the copy.



Pl ccxi, fig. 15 is a curious fragment, from the Fourth Semitic stratum. It is the figure of an animal, standing beside a broken pedestal of some kind. On the other side is another animal, but this is almost all destroyed. The object was covered with green enamel, the animal's figure being spotted with brown.

Some stray fragments of enamels were found, but just enough to shew that the art was appreciated, and that specimens of it were brought to Gezer. None of the fragments that came to light were of sufficient importance to call for special attention. Of the *glass* of Egyptian origin we have already spoken in § 30, division 5, and need not return to it. Reference should, however, be made to a grotesque head, identical in pattern to one found at Tell es-Sâfi (*EP*, p. 42, fig. 19), found in III 4. This specimen had been partly melted in fire, and so was much distorted, but its character was unmistakable.

#### K. ALABASTER

All, or nearly all, the objects of alabaster found at Gezer were of Egyptian origin. It was evidently a very important object of trade during both the XIIth and XVIIIth Egyptian dynasties, to judge by the number of vessels and fragments of vessels that were found. It is unknown in the Pre-Semitic, rare in the First Semitic, and uncommon in the Hellenistic Period.

Some of the alabaster vessels have already been described elsewhere. Such are the vessels from the Philistine tombs (Vol. I, figs 152, 157, and Pl. lv), a frequent type: the fine vessels from cave 28 II (Pl. xlii), and especially the sherd with cartouche of Ramessu II from the cistern in cave 15 II (Pl. xxiv, fig. 1).

The commonest type of vessel in alabaster is that shewn in Pl. ccxii, fig. 1 [II 18]. This specimen is very finely veined. The type has a narrow, flat base, inverted conical body, contracting to a concave neck, the upper surface of the mouth is flat. The hollow is made simply by drilling a cylindrical axial shaft through the vessel, stopping it, of course, before the bottom is reached. Very often the top is broken off as in fig 461, no. 2. The specimen shewn is from the First Semitic stratum, but the type persists down to the Hellenistic, to which the last-quoted example belongs.

There are a number of varieties of the type. Pl. ccxii, fig. 2, from V 7, is an example with a pointed instead of the usual flat base. The body in this is a little more globular than usual. Fig. 3 is from IV 3—a larger and more perfect example. The blunting of the point tends to develop such a vessel as Pl. ccxiii, fig. 9, an early example

from II a 28 A later specimen is the fragmentary Pl. ccxii, fig 4, from the N end of III 28

Pl. ccxii, fig 5, which belongs to the end of the Third Semitic Period, is remarkable for its very slight expansion—it is almost cylindrical On the other hand, fig 6 [V 17] expands before it contracts. In this case there never was a mouth, the vessel as it stands being perfect save for some slight chipping on the rim. The veining is remarkably regular in this example, consisting of horizontal planes of a white colour, at almost equal intervals

Handles, or suggestions of handles, are rare in this type of vessel. They will be seen on the examples from the Philistine tombs: notice also the knobs on Pl. ccxii, fig. 7 (end of Third Semitic Period) and Pl ccxiii, fig. 10, from V 16. The latter vessel was beautifully coloured.

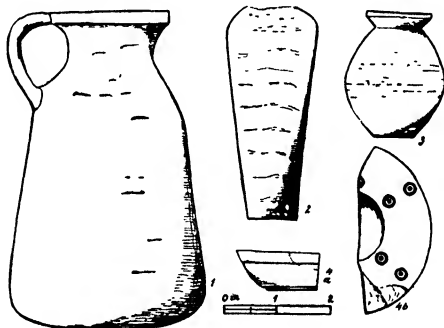


FIG 461—ALABASTER VESSELS

Another type of alabaster vase is shewn in Pl ccxii, fig. 8 [II 18]. Here the base is a flat disc projecting beyond the sides of the vessel. In other respects the type more or less resembles that just described. Another example, beautifully coloured in the original, is shewn in Pl ccxiii, fig. 12 Near it was found the jar-stopper fig 17 on the same Plate, though the jar to which it belonged was not forthcoming. There are four incised lines drawn round the rim of this stopper, and two round the central boss. A perforation is drilled partly (not completely) through one side. this may be for securing a seal. In Pl ccxii, fig. 9, which is restored from some fragments found in IV 19, a rare example of a *handle* is shewn; there is one on each side of the vase. This, as is usual in vessels in this material, adheres to the side of the vessel along its whole length, and is not undercut in any way. To find a loop-handle (as in fig 461, no 1) is very rare.

A third form is a globular vessel with a more or less convex base, and conical body. Except that the mouth is chipped, Pl ccxiii, fig. 11 [V 13] is a good example, especially interesting in that it retains its stopper. Jar-stoppers in alabaster were

not uncommon, but for some reason it was very unusual to find them along with the vessels to which they belonged. Fig. 13 [V 12] is a smaller but otherwise similar example. Pl. ccxii, fig. 10 [V 7] and 11 [IV 10] are of the same type though differing in the treatment of the neck. while Pl. ccxiii, fig. 14 [II 29] is rectilinear in outline. Fig. 461, no. 1 [VI 1] is of this type, but, as just noted, it has a loop-handle, which is rare.

Easing off the abruptness of the curvatures produces a vessel like Pl. ccxii, fig. 11 [III 28]. This also is a type not confined to any one stratum, though it is not nearly so frequent as those described above. Another specimen is fig. 461, no. 3 [II 2]. Only half of this example was found.

Vessels in alabaster were not all made in one piece. Pl. ccxii, fig. 12 [III a 30], is evidently the neck (or spout?) of a vase that consisted of several sections, fitting together. The commonest of these complex constructions were the footed saucers, of which a complete specimen from the Fourth Semitic tomb 143 is shewn in Pl. cvi, fig. 4. No other example was found of the two parts lying together, but specimens of the individual members of such a combination were found elsewhere

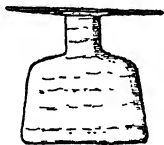


FIG. 461 a—ALABASTER VASE

Pl. ccix, fig. 98, from the cistern in IV 11 already described, is an example of the saucer, while specimens of the foot are shewn in Pl. ccxii, figs. 15 [VI 29] and 16 [II 18].

A few forms, exceptional in alabaster, have to be noticed. Such are the half of a lentoid vessel, Pl. ccxii, fig. 14, found in the cistern at the N end of V 21 the fragment of a Bügelkanne, Pl. ccxii, fig. 16 [III 20] and the tripod base of an ornamental bowl, Pl. ccxii, fig. 17 [III a 28]. Only one leg of the tripod was forthcoming, but enough material was available for the reconstruction offered, there was, however, no information as to how the upper part was finished.

Another remarkable vessel was fig. 461 a, which was found in the Hellenistic stratum. This little vase—it was just under 2½" high—had two points of interest: the greatly expanded flat disc lip, surrounding the mouth, and the fact that the hollow followed the line of the outer surface of the vessel (as indicated by dots in the diagram). Considering the narrowness of the neck, the cutting of the vessel in this way must have been a task of no little difficulty. It was much broken.

As a rule the outer surface of alabaster vessels was left plain, the natural veinings being justly considered a sufficient ornament. Some few were fluted, however, as in the sherd Pl. ccxii, fig. 20, which was found close to the Merneptah pectoral.

*Saucers* in alabaster, except those intended for mounting on stands as described above, were very rare: Pl. ccxii, fig. 18 [IV 10] is an example. Some fragments of spoon-like objects—like that shewn in Pl. ccxi, fig. 11, but of simpler design—were found, but nothing even nearly complete. A fragment of a small specimen is shewn in Pl. ccxii, fig. 5a [Va 28]

*Jar-stoppers* as a rule were simply flat circular discs, as in the specimen already mentioned (Pl. ccxiii, fig. 11). The elaborate cover fig. 17 in the same Plate, which has likewise been described already, is quite unusual. Often, however, they are rebated on one side, for fitting closely on the lip of the vessel, as in Pl. ccxii, fig. 15, from IV 28. This rebate sometimes becomes a projection in the middle of the disc, so that the stopper is exactly like the glass cover of a medicine-bottle. The large stopper Pl. ccxii, fig. 21 is in limestone; it is probably a local imitation of some alabaster original. It was found in the shallow earth covering the large building at the N. end of IV 15-17; this earth contained a mixture of objects from Third

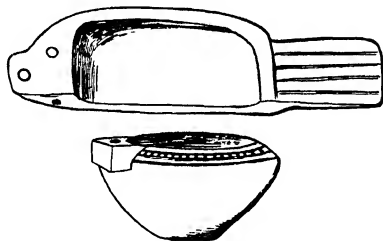


FIG 462—EGYPTIAN IVORY OBJECTS

Semitic to Hellenistic, and they could not be satisfactorily discriminated when their own appearance did not give a clue to their date

Of other objects in alabaster, the following may be enumerated: furniture-knobs (described and illustrated above, p. 252); mace-heads (see the following chapter; also the small example with unfinished perforation, Pl. ccxii, fig. 16a from V 19); and a shrine-like object, exactly resembling the pottery specimens Pl. cliv, figs. 9, 13, found in IIIa 29. I am not clear what to make of the object shewn in Pl. ccxii, fig. 19, which was picked up on the surface of the mound, it seems to be the capital (or base?) of a column belonging to a shrine of some kind. It is roughly and irregularly cut, as the drawing shews

In Pl. ccxi, fig. 10 the ear of an alabaster figure is shewn; the rest of the figure was not discovered. Another is shewn in Pl. ccxii, fig. 18 [V 28]. The curious figure with two animals' heads, Pl. ccxiv, fig. 38, has already been described in discussing the animal figures. In IV 20 was found a figure of an animal, perhaps a dog, in alabaster,  $1\frac{1}{4}$ " long.

But the most remarkable specimen of carving in alabaster is undoubtedly the

fragment shewn in two aspects in Pl ccxiii, fig. 19. The technique is entirely Egyptian. It represents a man, whose only covering is the wig [or necklet?], a small portion of which remains in the fractured upper edge, he is carrying a pig. The bodies of both man and pig are hollow, and there is a communication between them; the pig's tail is cut on a separate piece of alabaster, trimmed as a stopper (shewn separately in fig. 19 c). *Uir manu eius porci genitalia prehendit; similiter cum uiro agit porcus*

Other valuable stones were used for vases, but in much smaller numbers, and all that were found were broken in pieces, a small serpentine vessel from the Water-passage (Pl. xix, fig. 15) being the only whole specimen to record. So far as they

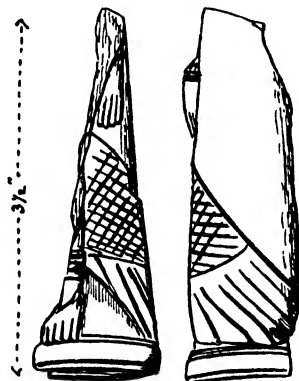


FIG. 463 —BONE FIGURE

went the fragments were all of familiar types of vases, and seem all to have more or less resembled the vase *EP*, Pl. 73, fig. 1, from Tell-es-Şâfi.

#### L. MISCELLANEA

We may simply mention under this head a "paint-grinder" (upper member only) of the kind described above (p. 37) in green-enamelled porcelain, from the Third Semitic Period: the beads described on p. 110, many of which are Egyptian\*; the inlays (p. 250)†, and the draughtsmen

\* To these should be added a peculiar boat- or shuttle-shaped bead, a few specimens of which were found in débris contemporary with the XVIIIth Dynasty. One of these, bearing the cartouche of Amen-Hotep III, is shewn in Pl ccix, fig. 93. They are all green enamelled

† Add to these the two ivory examples Pl. ccix, figs. 96, 99, which were found in the house where stood the Egyptian statue described at the beginning of this section.

(p 302.) The ivory perfume boxes, described on p. 118, are also probably Egyptian, this is certainly the case in the example shewn in fig. 462, no. 1, from **V 18**, and the small ivory bowl, with a perforated projection on one side, fig. 462, no. 2 [**V 28**].

### § 38.—MESOPOTAMIA

With the exception of the three fragments of tablets, already described in Chapter I, there was very little evidence to be identified of intercourse with the great civilizations of Mesopotamia—singularly little, considering that the contents of the two Assyrian tablets shewed that there was an important element in the population of the city at the time to which they belonged, whose personal names, script, speech, and legal procedure were purely Assyrian. Many even of the cylinders enumerated below are evidently rude local imitations rather than actual importations, they are, however, founded on Mesopotamian models, and on that account are enumerated in this section.

The carved bone figure fig. 463 appears to be of the Assyrian style, and is almost the only object found, with the exception of the cylinders and a few seals, that seems to betray Mesopotamian influence. Another bone figure (Pl. ccxiv, fig. 32), found in the Hellenistic stratum, may possibly be also Assyrian in origin, though of this I feel uncertain. It measured 3" in length. The bronze statuette Pl. ccxiv, fig. 33, though in some details recalling those of Egyptian origin described under the previous section, is in its attitude and cast of countenance (so far as corrosion enables us to distinguish the features) more suggestive of Chaldaean art than of Egyptian, it is therefore recorded here. There is a band of gold leaf round the loins; there were also remains of gilding on the face, the total height is 5¼". This figure was found in **IV 19**.

The following is a record of the cylinders that came to light in the excavation. Like the catalogue of scarabs on a previous page, it is merely a hand-list, which the specialist can expand for himself with the aid of the drawings. The seal-cylinder with Egyptian inscription, noticed in the last section, is of course omitted here.

### *Second Semitic Period*

1 Two figures on each side of an altar; behind a standing object another figure. Polished haematite, fragment only. From tomb **252** Pl. cxxi, fig. 21

- 2 Three rude figures standing before a seated figure. Pl. cxxxvii, fig. 44.
- 3 Seated figure between two standing figures. *Ib.* fig. 45.
- 4 Geometrical pattern *Ib.* fig. 46
- 5 A man between two animals *Ib.* fig. 47.
- 6 A deer and a flying bird. *Ib.* fig. 48
- 7 An animal, apparently a pig; behind it a sceptre with two spiral coils, below it a guilloche *Ib.* fig. 49
- 8 Two groups of a man struggling with an animal, a sacred pillar between them. *Ib.* fig. 50.

The seven cylinders figs 1-8, which are made of friable glossy paste, were found in the pile of beads described on p. 110

9. Three birds; blue enamelled. Pl. ccii b, fig. 4.
  10. Figure kneeling, holding a tree torn up by the roots, and two stags seated between bands of guilloche. Pl. ccii b, fig. 5
- [The two cylinders figs. 9, 10 were also found in a pile of beads together



FIG 464 —CYLINDER No. 17

with the scarabs of Amen-Hotep III, and the head of Sebek shewn in the same Plate]

- 11 A man holding a scorpion, in front of a seated figure; behind, an animal or sphinx, with guilloche pattern Stone; top and bottom broken off. Pl. ccxiv, fig. 6
12. A horned animal and sphinx on either side of a sacred tree: green enamelled. *Ib.* fig. 11.
13. Four birds walking, a fret below cyanus *Ib.* fig. 13.
- 14 Guilloche pattern: green enamelled *Ib.* fig. 16
- 15 Two stags symmetrically placed, each looking backward, and a guilloche: green enamelled *Ib.* fig. 17
- 16 Five figures precisely identical, evidently stamped on the cylinder with a die blue enamelled *Ib.* fig. 18

### Third Semitic Period

- 17 A sacrificial scene; four figures in embroidered robes with scimitars, etc. steatite, very finely engraved Fig. 464.
18. Three men and a tree limestone. Pl. ccxiv, fig. 5.

19 A man between two rampant lions, between him and one of them a curved scimitar. *Ib.* fig. 7.

20 Two figures on either side of a sacred tree; two seated stags, with a guilloche behind. *Ib.* fig. 21.

20 a. Geometrical pattern: green enamelled. Pl. cciii a, fig. 24.

#### *Fourth Semitic Period*

21, 22. Two cylinders with men, dragons, etc., upon them, from tomb 153. Vol. I, p. 359, fig. 186.

23. A stag and a tree: clay. Pl. ccii a, fig. 12.

24. A man, and two birds under a fret: blue enamelled. Pl. cciv a, fig. 15.

25. A tree, two animals, and a man: diorite. Pl. ccxiv, fig. 1.

26. Two men and nine stags, much worn: diorite. *Ib.* fig. 2.

27. A man driving or spearing a stag: blue enamelled. *Ib.* fig. 8.

28. Three figures walking, very roughly indicated: brown stone. *Ib.* fig. 9.

29. A fret green enamelled. *Ib.* fig. 10.

30. A fret grey diorite, fragment only. *Ib.* fig. 10 a.

31. A man between two animals (?): limestone, very rudely executed. *Ib.* fig. 12.

32. A man standing in front of a sacred tree: behind it two animals with their necks crossed. *Ib.* fig. 20

33. A winged figure slaying an animal with a curved scimitar. *Ib.* fig. 22.

34. A bowman hunting an animal, behind him a man standing; above, the sun and a bull's head: haematite, much worn. *Ib.* fig. 24.

35. Coarse cylinder of pottery, not perforated, with a very peculiar device—perhaps rude animal figures, but it may be questioned whether it was intended to be more than a group of random lines. *Ib.* fig. 27.

#### *Hellenistic Period*

36. Two men with a curved scimitar on each side of them; behind, a two-headed and winged figure. Pl. ccxiii, fig. 3.

37. Sacrificial scene, vaguely and eccentrically drawn; a seated figure with in front priests holding upright an animal. A red-coloured stone. Pl. ccxiv, fig. 25.

The following cylinder was found outside the city walls north of the High Place. There had been a good deal of rubbish thrown there, of widely different periods, so that it is not possible to assign its archaeological level.

38. Two man-headed and winged bulls facing one another. Pl. ccxiv, fig. 23.

The following four cylinders were overlooked in excavation by the workmen, and afterwards found in picking over the waste earth. Their strata are therefore uncertain

39. A man holding a tree (?), and two birds walking over a guilloche pattern. Pl. ccxiv, fig. 4.

40. A remarkable cylinder, representing an animal with a serpent(?) coiled round it, in front of a sacred tree: behind, a bull's head. *Ib.* fig. 14.



41. A man contending with two animals, one of them winged, and a tree: black paste, strung on a bronze wire loop. *Ib.* fig. 15.

42. Marduk and Tiamat in conflict, the latter represented by a serpent-like monster. *Ib.* fig. 19

It will be noticed that none of these cylinders bore inscriptions, though Taanach yielded one seal-cylinder with a cuneiform inscription (Sellin, *Tell Ta'annek*, p. 28). Several of them bear the curved scimitar, identical in shape with the remarkable example found in tomb 30 (Pl. lxxv, fig. 16). This, and the likeness of the weapon to the well-known sword of Ramman-Nirari, are links which enable us to see in this another of the scanty bonds of connexion between Gezerite culture and the civilization of Mesopotamia.

Pl. ccxiv, figs. 28-30 represent three Assyrian seals of blue glass, with dragons and other figures upon them. Another was found in tomb 153, and is represented in Vol. I, p. 359, fig. 186: another, much disintegrated, from the Fourth Semitic stratum, is shewn in fig. 437, no. 8. These seals all belong to the period of the Assyrian tablets, and probably were left behind by members of the Assyrian garrison to whom we owe these documents.

But the most important relics of Mesopotamian culture are the two seal impressions represented respectively in Pl. ccxiv, fig. 26, and in figs. 465, 466—the first of these being an enlarged photographic view, the second a drawing very slightly larger than the original, which will enable the figures to be more clearly made out.

The first of these was found in II 30, and is therefore among the oldest relics of foreign influence that the mound contained. It was a lump of black clay that had evidently been the stopper of a jar: a cylinder had been rolled over it, making one impression and part of another. At the right-hand edge the clay was broken, but the imperfect second impression enables us to restore the fractured portion almost completely. It bore at the right-hand end a human figure seated, but it was not clear what he was seated upon. His back is turned to the rest of the designs which consist of animal and other figures that are better discussed after we have described the other seal. This was found in the same trench but at a later level, namely, in débris contemporary with the Tell el-Amarna period. This of course does not necessarily date the original cylinder. The object is a half cylinder of unbaked clay\*  $3\frac{3}{8}$ " long,  $1\frac{1}{4}$ " broad, and  $1\frac{1}{4}$ " thick. It has two bands of figures in relief upon it that have evidently been impressed by rolling a seal cylinder, the complete design appears twice in each band. It displays the *sun* and *moon*, with a series of figures most of which are recognizable as signs of the zodiac, though the signs are not in proper order. Beginning at the left-hand end of the upper line (after the ladder-like object here partially impressed) is a horned animal, which might be *Aries*. The clumsy ribbed figure above would be either *Leo* or *Taurus*. Dr. Pinches prefers the former alternative. I am not certain what significance to attach to the

\* Which shews that the sealing was most likely made in Gezer itself and not brought from Babylonia.

smaller quadruped between, or to the bird which follows. Next comes an animal with ibex-like horns, perhaps *Capricornus*, and above it a creature that may be the artist's conception of *Cancer* (but see below). The T-like objects above and below the ibex, and the small star above and to the right of *Cancer*, may be marks filling up blank spaces—though it may be that the inverted T-mark under the ibex is meant for *Libra*. The wedge underneath the bird may also be a mere block, but it possibly is intended to indicate an egg. The crab is followed by a vertical serpent; if the guess just made as to the identification of *Libra* be not correct, it may be that this indicates *Serpens*, substituted for *Libra* (to which constellation it is adjacent in



FIG. 465.—CLAY TABLET WITH SIGNS OF THE ZODIAC

the heavens). Under the sun are *Pisces* and *Scorpio*, both unmistakable: above *Scorpio* is an object that looks like a palm-tree, but which I take to be an ear of corn, typifying *Spica*, the principal and only conspicuous star in *Virgo*. Next to this is an inverted amphora, no doubt meant for *Aquarius* (also called *Amphora*: compare the modern Arabic name "the bucket"). Last comes a peculiar object on the top of a ladder.

This seal was discussed in *QS*, January 1908, pp. 26-30, by the Rev. C. J. Ball, the Rev. C. H. W. Johns, Dr. Pinches, and Prof. Sayce. The general opinion of these scholars, most definitely expressed by Mr. Ball, was that the seal from which the impression had been made must have been considerably older than the context in which the impression was found. This is confirmed by the other seal, above

described. The general consensus of opinion seems to be, moreover, that the connexion of the seal with the zodiac is only secondary, that primarily the seal characters are copied from some group of signs resembling those of the Babylonian boundary marks (*Kudurri*),\* which signs are sometimes, though apparently not always, zodiacal. There is some doubt expressed about the interpretation or identification of certain signs. Mr. Ball and Dr. Pinches both take the symbol I identified as *Cancer* for a fish. Dr. Pinches calls attention to a small cross beside the tail of the serpent, and suggests its equation to the Babylonian sign for *Gemini*.

Returning now to the first seal, we may in the light of the more perfect second attempt an identification of its characters. Beneath the sealed figure is a horned animal, perhaps *Aries*; while behind the figure is another, that may be *Capricornus*.

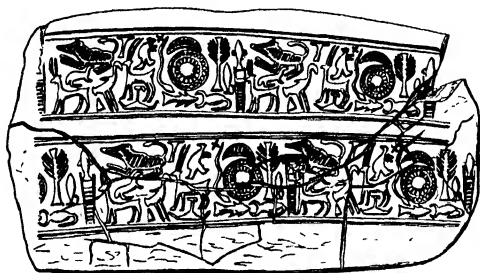


FIG. 466 —CLAY TABLET WITH SIGNS OF THE ZODIAC

The first of these two animals appears to be winged, as is also a more indefinite creature immediately behind it. Above *Capricornus* is a bird, which the seated man holds in his hand. This, like the bird in the other tablet, cannot be identified with a zodiacal sign. Behind all these is a very conspicuous *Taurus*, with *Amphora* below, and *Spica* between the horns. The rest of the seal was unfortunately rubbed before baking, and the few traces of other signs are unintelligible. The vertical bar like a palm branch is probably meant to be a divisional line between successive impressions of the cylinder.

### § 39 —CRETE, CYPRUS, PHILISTIA

In the section on Pottery we have already spoken of most of the traces of intercourse with Crete. The great days of Cretan civilization were already over when the Palestinian tribes began to take cognizance of the

\* The tablet, and at any rate the seal, appear to be actually older than the *Kudurri* themselves.

world beyond their horizon, and therefore we do not find more than an indirect and reminiscent influence of Cretan culture: except in so far as

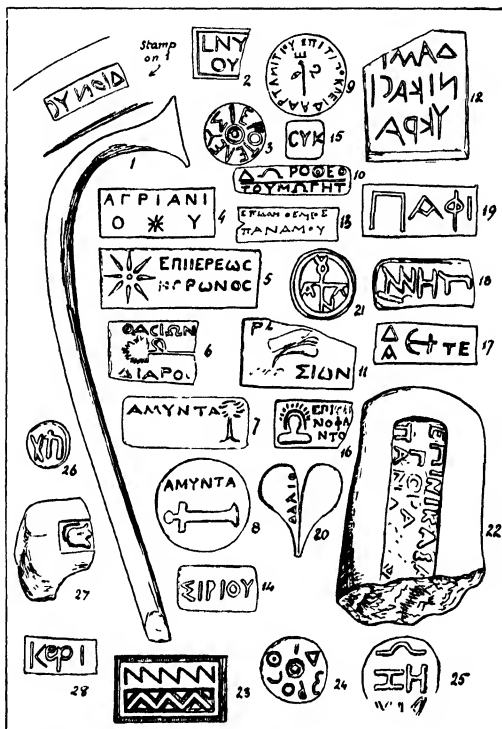


FIG. 467.—RHODIAN JAR-HANDLES

the Cretan colony which we know as the Philistines brought with them ideas from the later phases of the history of their wonderful parent-land.

Probably it was through Cyprus that most of the art-influence of the Aegean reached the coasts of Palestine, except such as were directly brought

in by the superior culture of the Philistines. The pottery, which has already been sufficiently described and illustrated, is identical with that found in large quantities in Cyprus. Though no specimens of the hideous Cypriote figure of a female divinity of the kind usually provided with gigantic earrings (such as is figured in *CCM*, Pl. iii, fig. 464) came to light at Gezer, one specimen was discovered in the mound of Tell el-Hesi (*MMC*, p. 68). On the other hand, the pillar-shaped figure (as *CCM*, Pl. vi, fig. 5503-5538) was fairly common in the later strata.

The "Philistine" tombs, described Vol. I, pp. 289-300, may be recalled in this connexion, as well as the Mycenaean sword, pl. lxxv, fig. 15.

#### § 40.—GREECE AND THE GREEK ISLANDS

Communication with Hellenic culture is manifested throughout the harvest of antiquities from the topmost stratum. It is quite clear that the importation of foreign creeds and customs, against which the Maccabaeae party made so valiant a stand, was not so much the work of Antiochus and his followers, on whom the blame is cast in the history of the doings of Mattathias and his sons, as a subtle and all-pervading influence which was inevitable in the circumstances of the time, and which was independent of the policy of individual statesmen.

It is likely that the active trade in wine, with the island of Rhodes, was more responsible for the pervasion of Hellenic ideals than were the persecutions of the Syrian kings and their creatures. Of this trade there is a striking record in the great pile of jar-handles stamped with the inscriptions enumerated below, which were broken off the wine jars.

As some representative specimens of the stamps are figured in *EP*, Pl. 64, it is unnecessary to illustrate here more than a few specially noteworthy examples. The following is a list of the inscriptions,\* omitting a few that were hopelessly illegible:

A[  
]A[ [ ]<sup>1</sup> ΔΑΛΙΟΥ  
ΑΓΡΙΑΝΙΟΥ<sup>1</sup> ΑΓΑ[Θ?]Α[Π?]ΟΥ  
ΑΓΑΘΟΚΛΕΥΣ (5)  
5 ΠΑΝΑΜΟΥ<sup>1</sup> ΑΓΑΘΟΚΛΕ

\* The inscriptions are in the alphabetical order of the principal name. Except where otherwise stated, the stamp is rectangular. The words "in rectangle" mean that a rectangular margin is drawn round the words in the stamp. The division into lines is marked by a short

- Π\*\*\* ΑΓ<sup>1</sup>ΑΘΟΚΑ  
 ΕΠ<sup>1</sup> ΙΕΡΕΩΣ<sup>1</sup> Α[ΓΑΘ]ΩΝΟΣ Helios-head to left.  
 ΕΠΙ ΑΓΕ<sup>1</sup>ΙΣΤΡΑΤΟ Helios-head to left  
 ΕΠΙ ΑΓΕΣΤΡΑΤΟΥ ΑΓΡΙΑΝΙΟΥ round rose.
- 10 ΑΓΗΝ[ι star above Ν  
 ΑΓΡΙΑΝΙΟΥ ΑΓΗCΙΑΑ  
 ΑΓΗΣ<sup>1</sup>ΙΠΠ[ο  
 ΕΠ<sup>1</sup> ΙΕΡΕΩΣ ΑΓΗΣΙΠΠΟΥ reversed, round rose.  
 ΕΠ[ι αγλουμ<sup>1</sup>ΒΡΟ[του
- 15 επι αγλου]ΜΒΡΟΤ[ου<sup>1</sup> ]ΙΟΥ  
 ΕΠΙ ΑΓΛΟΥ<sup>1</sup>ΜΒΡΟΤΟΥ<sup>1</sup> ΔΑΛΙΟΥ  
 ΕΠΙ ΑΓΛ[ΟΥΜ]<sup>1</sup>ΒΡΟΤΟΥ<sup>1</sup> ΣΜΙ[ΝΘΙΟΥ]  
 ΕΠΙ ΑΓΛΟΥΜ<sup>1</sup>ΒΡΟΤΟΥ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ  
 ΕΠΙ ΑΓΛΟΥΜ<sup>1</sup>ΒΡΟΤΟΥ<sup>1</sup> ΥΑ<sup>1</sup>ΚΙΝΘΙΟΥ (2)
- 20 ΑΓΟΡΑΝΑΚΤΟΣ<sup>1</sup> ΘΕΣΜΟΦΟΡΙΟ  
 ΑΓΟΡΑΝΑΚΤΟΥ<sup>1</sup> ΘΕΣΜΟΦΟΡΙΟΥ  
 ΑΓΟΡΑΝΑΚΤ<sup>1</sup> ΔΑΛΙΟΥ  
 ΑΓΟΡΑΝΑΚΤΟΥ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ a line round margin; the final ΟΥ of each word  
 is outside this line  
 Α[ΓΟΡΑΝΑΚΤΟΣ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ similarly treated, the ΟΣ being outside the margin
- 25 ΑΓΟΡΑΝΑ<sup>1</sup>ΚΤΟΥ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ  
 ΑΓΟΡΑΝΑΚΤΟΥ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ in a marginal line; the final ΟΥ of the first line  
 and the Υ of the second outside  
 ΑΓΟΡΑΝΑΚΤ<sup>ο1</sup> ΠΑΝΑΜΟΥ  
 ΑΓΟΡΑΝΑ[ΚΤΟΥ]<sup>1</sup> ΠΑΝΑΜ[ΟΥ]  
 ΑΓΟΡΑΝΑΚΤΟΣ<sup>1</sup> ΠΑΝΑΜΟΥ
- 30 ΑΓΟΡΑΝΑΚΤΟΥ ΠΑΝΑΜΟΥ<sup>1</sup> ΔΕΥΤΕΡΟΥ<sup>1</sup>  
 ΑΓΡΙΑΝΙ<sup>1</sup>Ο\*Υ (fig. 467, no. 4).  
 ]<sup>1</sup> ΑΓΡΙ[ανιου]

vertical accent (') If a device occurs at one end or the other of the inscription, this is indicated by such a formula as "rose to right" or "to left" When the stamp is circular or oval, with a device in the centre and the inscription surrounding it, the words "round rose," "round Helios-head," or whatever the device may happen to be, is added The bottoms of the letters are as a rule turned towards the device, as in an ordinary coin in the rare cases where they are turned the other way, the fact is expressed by the words "reading outward" A single square bracket, as ]ΙΟΥ, denotes that the stamp is broken across and the lost part cannot be restored. When the inscription is too worn to decipher, but the part lost can be gauged, stars are used: thus \*\*\*\*\*ΙΟΥ means that there are apparently five worn letters before the Ι Restorations are in brackets they are in small letters when the stamp is broken, in large letters when it is worn Minuscles not in brackets denote letters partially legible but not quite certain. Numbers in brackets after the description of the handle indicate the number of specimens of the stamp in question that came to light

<sup>1</sup> The ΔΕΥΤΕΡΟΥ has evidently been squeezed in at the end of the month *Panamos*, to make the seal do duty for the intercalary month following, and so to save the trouble of cutting a fresh seal It is in small letters

- ΕΠΙ ΑΔ\*\*\*\*\*\* ΔΑΛΙΟΥ  
Α[Θ?]ΑΝΑΓΟΡ[ι]  
35 ΑΘΑΝΟ<sup>1</sup>ΔΟΤΟΥ cornucopia to right (2).  
ΑΘ\*\*\*\*\*ΟΣ  
ΕΠΙ ΑΙ(?)ΝΕ\*Σ[ ]<sup>1</sup> ΣΜΙΝΘΙΟΥ  
ΕΠΙ<sup>1</sup> ΑΙΝΗΤΟΡΟΣ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ  
ΕΠΙ ΑΙΣ<sup>1</sup>ΧΥΛΙΝΟΥ (2)  
40 ΑΚ in monogram, reversed  
\*\*ΑΚΡΑΤΕος round rose.  
επι αλεΞ[ε]ΑΝ[ι]δ[ρ]ΟΥ<sup>1</sup> [φιλ]ΑΝΙΟΥ  
ΕΠΙ ΑΛΕΞ<sup>1</sup>ΙΜΑΧΟΥ<sup>1</sup> ΘΕΣΜΟΦΟΡΙΟΥ  
ΑΛΚΙΜΑΧΟΥ  
45 ]Α\*ΜΟΥ a star between the Α and the fractured edge. The Α may be a Χ.  
ΑΜΥΝΤΑ Helios-head to right (fig 467, no. 7)  
ΑΜΥΝΤΑ in circular stamp, sword below (fig 467, no. 8).  
ΑΝΔ[ρ]Α<sup>1</sup> ΘΕΣΜΟΦΟΡΙ  
ΕΠΙ ΑΝΔΡΙΑ ΘΕΣΜΟΦΟΡΙΟΥ round rose  
50 ΕΠΕΙ (sic) ΑΝΔΡΙΑ<sup>1</sup> ΔΑΛΙΟΥ  
ΕΠΙ ΑΝΔΡΙΑ<sup>1</sup> ΑΓΙΜΟ<sup>1</sup> δαλιΟΥ  
[ ]ΑΝΟΥ a dot above the Ν. Not Rhodian.  
ΔΑΛΙΟΥ<sup>1</sup> ΕΠΙ ΑΝΔΡΙΑ  
ΕΠΕΙ (sic) ΑΝΔΡΙΑ<sup>1</sup> ΑΡΤΕΜΙΤΙΟΥ (sic)  
55 ΕΠΙ ΑΝΔΡΙΑ<sup>1</sup> ΑΓΡΙΑΝΙΟΣ  
[ΕΠΙ] ΑΝΔ<sup>1</sup>ΡΙΑ ΥΑ<sup>1</sup>ΚΙΝΘΙΟΥ  
ΕΠΙ ΑΝΔΡ[Α]<sup>1</sup> ΠΕΔΑΓΕΙΤΝΙΟΥ  
ΕΠΙ ΑΝΔΡ[ονει]<sup>1</sup>ΚΟΥ ΒΑΔΡ[ομ]<sup>1</sup>ΟΥ<sup>1</sup>  
ΕΠΙ ΑΝΔΡΟ<sup>1</sup>ΝΕΠΟΥ (sic)<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
60 [ΕΠΙ Α]ΝΔΡΟ<sup>1</sup>[ΝΕΙΚΟΥ]<sup>1</sup> [illegible].  
ΕΠΙ ΑΝΔΡΟΝΕΙΚ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
ΕΠΙ ΑΝΔΡΟΝΕΙΚΟΥ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
ΕΠΙ ΑΝΔΡΟΝΙΚΟΥ (sic)<sup>1</sup> ΔΑΛΙΟΥ  
ΕΠΙ ΑΝΔΡΟΝΙΚΟΥ ΔΑΛΙΟΥ round rose.  
65 ΕΠΙ ΑΝ[δρονεικου] ΔΑΛΙΟΥ round Helios-head.  
ΕΠΙ ΑΝΔΡΟΝΙΚΟΥ (sic)<sup>1</sup> ΥΑΚΙΝΘΙΟΥ  
ΕΠΙ ΑΝΔΡΟ<sup>1</sup>ΝΙΚΟΥ<sup>1</sup> ΚΑΡΝΕΙΟΥ  
]ΑΝΕΥΣ  
ΑΝΤ[  
70 ΑΝΩΝΟΥ reversed, sword below  
ΙΕΡΕΥΣ ΑΠ\*\*\*ΔΗC Ν\*\*ΑΜΑΝΤΟ round rose.  
ΕΠΙ Α\*\*\*\*\*ΠΟΥ<sup>1</sup> ΔΑΛΙΟΥ  
ΑΡΑΤΟΦΑΝΕΥΣ (3)  
ΕΠΙ ΑΡΑΤΟΦΑΝΕΥΣ [ΣΜΙ]ΝΘ[ΙΟΥ] round rose.  
75 ΕΠΙ ΑΡΑΤΟΦΑΝΕΥΣ ΑΡΤΑΜΙΤΙΟΥ round rose.


<sup>1</sup> The stamp is complete in this case, but the missing letters had been cut or broken from the original seal

- ΕΠΙ ΑΡΑΤΟΦΑΝΕΥΣ *παραμον* round rose.  
 Α[Ρ]ΕΤΑΣ  
 [ ]ΑΡΙ[ ]\*ΙΔΑ[ ]\*\*ΟΔ  
 ΕΠΙ Α<sup>1</sup>ΡΙΣΤΑ *Ichlos-head to left.*  
 80 ΕΠΙ Α<sup>1</sup>ΡΙΣΤΑ<sup>1</sup> ΠΑΝΑΜΟΥ round rose.  
 [ΕΠΙ Α<sup>1</sup>ΡΙΣΤΑΚΟΥ<sup>1</sup> ΒΑΔ]ΡΟΜΙΟΥ  
 ΕΠΙ ΑΡΙΣΤ<sup>1</sup>ΑΚΟΥ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
 ΕΠΙ ΑΡΙΣ<sup>1</sup>ΤΑΚΟΥ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
 ΕΠΙ ΑΡΙΣΤΑ<sup>1</sup>ΚΟΥ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
 85 ΑΓΑΘΕΡΟΥ<sup>1</sup>ΔΟΥ ΕΠ[Ι] Α<sup>1</sup>ΡΙΣΤΑΚΟΥ  
 ΑΡΙΣΤΑΡΧΟΥ a star in each corner and one above the middle of the name (8).  
 ΕΠΙ ΑΡΙ<sup>1</sup>ΣΤΕΙΔΑ<sup>1</sup> ΔΑΛΙΟΥ  
 ΑΡΙΣΤΙΩΝΟΣ (4)  
 ΕΠΙ ΑΡΙΣΤ[ΙΩ]<sup>1</sup>ΝΟΣ<sup>1</sup> ΠΑΝΑΜΟΥ  
 90 ΕΠΙ ΑΡΙΣΤΟ<sup>1</sup>ΓΕΝΕΥΣ<sup>1</sup> ΔΑΛΙΟΥ (2)  
 [ΕΠΙ Α<sup>1</sup>ΡΙΣΤΟΓ[ΕΝΕΥΣ ΑΡΤΑΜΙΤ]ΙΟΥ round rose.  
 ΕΠΙ ΑΡΙΣΤΟΔΑΜΟΥ ΒΑΤ[ΡΟΜ]ΙΩΝ round rose: a seal with ΙΠΠΟΚΡΑΤΕΥΣ associated with this  
 ΕΠΙ ΑΡΙΣΤΟΔΑΜΟΥ ΣΜΙΝΘΙΟΥ round rose.  
 ΑΡΙΣΤΟΚΛΕΥΣ round rose (5).  
 95 ΑΡΙΣΤΟΚΡΑΤΕΥΣ a star in each corner of the seal.  
 ΑΡΙΣΤΟΚΡΑΤΟΥ  
 ΑΡΙΣΤΟΚΡΑΤΟΥ  
 ΕΠΙ ΑΡΙΣ<sup>1</sup>ΤΟΜΑ + ΟΥ (sic)<sup>1</sup> ΣΜΙΝΘΙΟΥ  
 ΕΠΙ ΑΡΙΣΤΟΜΑΧΟΥ ΥΑΚΙΝΘΙΟΥ round rose.  
 100 Α[ΡΙΣΤΟΞ]ΕΝΟΥ round rose.  
 ΑΡΙΣΤΟΥ  
 ΑΡΙΣΤΟΦΑΝΕΥΣ round rose  
 ΕΠΙ ΑΡΜΟCΙΑΑ  
 ΕΠΙ ΑΡΜΟ<sup>1</sup>CΙΑΑ  
 105 ΕΠΙ ΑΡΜΟCΙΑΑ  
 ΕΠΙ ΑΡΜΟCΙΑΑ ΔΙΟCΘΥΟΥ round rose.  
 ΕΠΙ ΑΡΜΟCΙΑΑ<sup>1</sup> ΔΑΛΙΟΥ  
 ΕΠΙ ΑΡΜΟCΙΑΑ ΣΜΙΝΘΙΟΥ  
 ΑΡΟΤ<sup>1</sup>[ ]<sup>1</sup>[ ]<sup>1</sup>[ ]<sup>1</sup>  
 110 ΑΡΤΑ<sup>1</sup> round rose.  
 ΑΡΤΑΜΙΤΙΟΥ round rose.  
 ΕΠΙ ΑΡΧ<sup>1</sup>[ ]<sup>1</sup> ΥΑΚΙΝΘ[ seal smudged  
 επι αρ<sup>1</sup>ΧΕΜ[ΒΡ]ΟΤΟ[υ round rose.  
 ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ [Θ]ΕΞΜ[ΟΦΟΡΙΟΥ] round rose.  
 115 ΕΠΙ ΑΡΧΕΜ<sup>1</sup>ΒΡΟΤΟΥ<sup>1</sup> ΒΑΔΡΟΜΙΟΥ  
 ΕΠΙ ΑΡΧΕΜ<sup>1</sup>ΒΡΟΤΟΥ<sup>1</sup> ΔΑΛΙΟΥ  
 ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ [ΔΑΛ]ΙΟΥ round rose, reading outwards.  
 ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ ΣΜΙΝΘΙΟΥ round rose.

<sup>1</sup> The faint traces remaining are not consistent with the restoration ΑΡΤΑΜΙΤΙΟΥ.




- ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ ΣΜΙΝΘΙΟΥ reversed.
- 120 ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ<sup>1</sup> ΣΜΙΝΘΙΟΥ  
ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ ΑΡΤΑΜΙΤΙΟΥ 1ound rose.  
ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ (2)  
[Ε]ΠΙ ΑΡ[ΧΕ]<sup>1</sup>ΜΒΡ[ΟΤΟΥ]<sup>1</sup> ΑΓ[ΡΙΑΝΙΟΥ]  
ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ
- 125 ΕΠΙ ΑΡΧΕΜΒΡ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ  
ΕΠΙ ΑΡΧΕΜΒΡΟ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ  
ΕΠΙ ΑΡΧΕΜΒΡ<sup>οτ1</sup> [ΥΑ]ΚΙΝΘΙΟΥ  
ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ  
ΕΠΙ ΑΡΧΕΜΒΡΑΤΟΥ (sic) ΥΑΚΙΝΘΙΟΥ round rose, reading outwards.
- 130 ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ<sup>1</sup> ΠΑΝΑΜΟΥ (3)  
[ΕΠΙ ΑΡΧΕ]ΜΒΡ<sup>1</sup>ΟΤΟΥ<sup>1</sup> [Π]Α[Ν]ΑΜΟΥ[Υ]  
ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ<sup>1</sup> ΠΑΝΑΜΟΥ (3)  
ΕΠΙ ΑΡΧΕΜΒΡΟΤΟΥ ΠΑΝΑΜΟΥ round rose, reading outwards.  
ΑΡΧΕΠΟΛΕΩΣ
- 135 *επι αρ*ΧΗΜ[βροτου<sup>1</sup> παν]ΑΜΟΥ (doubtful)  
ΕΠΙ ΑΡΧΙΣΤ<sup>1</sup>Μ\*\*Υ<sup>1</sup> ΣΜΙΝΘΙΟΥ  
ΕΠΙ ΑΡΧΟΒ\*\*\*\*<sup>1</sup> [Δ]ΑΛΙΟΥ in minute characters.  
ΕΠΙ ΑΡΧΟΚΡΑΤΕΥΣ ΥΑΚΙΝΘΙΟΥ round rose.  
ΕΠΙ \*\*\*ΑΡΧΟΣ<sup>1</sup> Α[ minute letters, worn.
- 140 ΑΣ[ ] ΑΓΡΙΑΝΙΟΥ 1ound rose. There is room for 7 letters in the blank,  
which have never been impressed.  
Α\*Σ\*\*\*Α<sup>1</sup> ΘΕΣΜΟΦΟΡΙΟΥ  
ΕΠΙ ΑΣ\*\*\*ΗΔΕΥΣ<sup>1</sup> ΣΜΙΝΘΙΟΥ  
ΑΣΤΑΙΑ [ΔΙ]ΟCΘΟΥΟΥ 1ound rose.  
ΑΣΤΥ Helios-head to left
- 145 ΕΠΙ ΑΣΤΥΜΗ ΑΓΡΙΑΝΙΟΥ round rose.  
ΕΠΙ ΑΣΤΥΜΗΔΕΥΣ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ  
ΑΦΡΟΔΙΤΟΥ  
ΕΠΙ Α\*\*\*ΧΟΣ<sup>1</sup> ΔΑΛΙΟΥ  
\*\*ΑΧ\*\*\*ΟΥ<sup>1</sup> ΠΑΝΑΜΟΥ
- 150 ΕΠΙ\*\* ΑΧ<sup>1</sup>ΟΥ<sup>1</sup> ΔΑΛΙΟΥ  
αΧΥΘΟΥ<sup>1</sup> ΘΕΣΜΟΦΟ a key below.  
Α\*\*ΩΝ<sup>1</sup> Β\*\*\*\*  
ΕΠΙ[ ]ΓΓ[ ] in a heart-shaped stamp.  
] ΓΓα (or η) [ 1ound rose.
- 155 ΓΟΛ\*\*ΣΥ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ smudged.  
Ε[ΠΙ]<sup>1</sup> ΓΟΡΓΩΝΟ[Σ]<sup>1</sup> Δ[ΑΛΙΟΥ]  
ΕΠΙ γο[ργωνος]<sup>1</sup> ΒΑΔΡ[ομου]  
ΕΠΙ ΓΟ[ΡΓΩΝΟΣ]<sup>1</sup> ΔΑΛΙΟΥ  
ΕΠΙ ΔΑ\*\* \*\*\* αρ<sup>1</sup>ΤΑΜΙΤΙΟΥ
- 160 ΔΑΛΙΟ in a heart (fig. 467, no. 20).  
\*\*\*\*\* ΔΑΛΙΟΥ  
ΔΑΛΙΟΥ  
ΔΑΛΙΟΥ<sup>1</sup> ΔΑΜΟ[ΔΙΚ]ΟΥ

- ΔΑΜΙ<sup>1</sup> ΝΙΚΑΚΙ<sup>1</sup> ΥΚΡΑ reversed. Not a Rhodian handle (fig. 467, no. 12).
- 165 ΕΠΙ ΔΑΜΟ<sup>1</sup>ΘΕΜΙΟΣ  
ΕΠΙ ΔΑΜΟΦΕΜΕΟΣ<sup>1</sup> ΠΑΝΑΜΟΥ (fig. 467, no. 13).  
ΕΠΙ ΙΕΡΕΩΣ<sup>1</sup> ΔΑ[ΜΟ]ΚΛΕΥΣ  
ΔΑΜΟΚΡΑΤΕΥΣ round rose (11). One of them with additional stamp  and another associated with the ΚΑΕΚΡΑΤΕΥΣ stamp.  
[ΔΑ]ΜΟΚΡΑ[ΤΕΥ]Σ round rose, reversed
- 170 ΔΑΜΟΚΡΑΤΕΥΣ<sup>1</sup> ΤΑΤ reversed; anchor below. The letters ΤΑΤ are under the end of the name. They are very faint; no trace of other writing.  
]ΔΑΜΟΥ  
ΔΑΤΕ with anchor (fig. 467, no. 17).  
Δ[ΑΤ?]Ο\*\*\*\*  
ΘΑΚΙΩΝ<sup>1</sup> ΔΙΑΡΟΥ (2). Fig. 467, no. 6.
- 175 ΔΙΦΟΙΝΥΚΙ<sup>1</sup> ΜΑΝΙΤΟC inside a rectangle with a line between the two lines of writing.  
ΕΠΙ Ι[ΕΡΕΩΣ Δ]ΙΟ<sup>1</sup> ΚΛΕΥΣ ΔΑΛΙΟΥ  
ΔΙΟΝ\*\*\*\* reversed.  
ΔΙΟΝΥ<sup>1</sup>ΚΙΟC  
[ΔΙΟ]ΝΥΣΙΟΥ round rose.
- 180 ΔΙΟΝΥC reversed (not Rhodian). Fig. 467, no. 1.  
ΔΙΟΣΘΥΟΥ round rose.  
]ΔΙΟΣΘΥΟΥ round rose  
ΔΙΟΥ (3)  
ΔΙΟΦΑΝΤΟΥ conventionalised Helios-head at both ends (17).
- 185 ΔΙΣΚΟΥ (3)  
ΔΙΣΚΟΥ Helios-head to right (2).  
ΔΙΩΝ Helios-head to left.  
Δ\*\*\*ΝΟΥ round rose.  
ΔΟ\*\*\*ΡΣΑ (?)<sup>1</sup> [second line illegible].
- 190 ΔΡΑΚΟΝΤΙΔΑ anchor below (10).  
ΔΡΟΚΑΣΙΣ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ  
Δ\*σ\*\*\*\*  
\*\*\*\*\*ΔΩΡΟ  
ΔΩΡΟΟΕΟΥ (3)
- 195 ΔΩΡΟΟΕΟΥ<sup>1</sup> ΤΟΥ ΜΩΓΗΤ (fig. 467, no. 10).  
\*\*\*\*]ΔΩΡΟΥ[\*\*\*\*\* a figure like a palm-tree (but possibly a Helios-head) between the Ο and Υ.  
ΕΠΙ Ε\*\*\*\* ΔΑΛ[λου να]<sup>1</sup>Κ[ινθίου reversed].  
ΕΠΙ Ε\*\*\* ΔΗΤΟΥ<sup>1</sup>ΤΝ\*\*\* Υ  
ΕΠΙ \*\*ΕΙΟΣ\*\*ΚΛΕΟΥ\*\* round rose. Badly stamped.
- 200 \*ΕΛΑΝΟΣ  
ΕΝΔε\*\*\*ΟΣ round rose.  
]ΕΝΕ<sup>1</sup> [ ] (Υ?)ΥΣ not a Rhodian handle. Probably there is not more than one letter missing from the beginnings of the lines. they are lost not by fracture, but by a failure of the stamp to impress them.  
ΕΠΙ ΙΕΡΕΩΣ \*\*\*\*\*ΕΝΟΣ round rose.  
ΕΠΙ \*\*\*\*\*ΕΞ[ round rose.

- 205 ΕΠΙΓΟΝΟΥ  
ΕΠΙΓΟΝΟΥ<sup>1</sup> ΒΑΔΡΟΜ  
ΕΠΙΦΡΑΤΕΥΣ a star in each corner  
ΕΠΟΓΕΝΕΥΣ caduceus below  
ΕΡΜ [the whole inscription]  
210 ΕΡΜΩΝΟΣ | \*\*\*\*\*Υ<sup>1</sup> reversed.  
]ΕΥ<sup>1</sup> ΣΜΙΝΘΙΟΥ  
ΕΥΑ[ ]<sup>1</sup> ΩΝΟ<sup>1</sup>  
ΕΠΙ ΕΥΔΑΜΟΥ  
ΕΥΔΟ reversed  
215 ΕΥΙ\*\*\*  
ΕΥΚΛΕΙ<sup>1</sup>ΤΟΥ with caduceus (25). One found belonging to a jar also stamped by Nikasagoras. In one specimen the name was in one line.  
ΕΠΙΕΡΕΩΣ ΕΥΜ\*\*\*ΧΟΥ round rose.  
ΕΠΙ ΕΥ<sup>1</sup>ΧΛΕΥΣ  
ΕΥΚΡΑΤΙΔΑ<sup>1</sup> [second line broken].  
220 ΕΠΙ ΕΥΚΡΑΤΙΔΑ ΥΑΚΙΝΘΙΟΥ round rose.  
ΕΠΙ ΕΥΚΡΑΤΙΔΑ ΠΑΝΑΜΟΥ  
ΕΠΙ<sup>ο</sup>ΕΥΦΑΝΕΥΣ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ  
ΕΥΦΡΑ<sup>1</sup>ΝΟΡΟΣ Helios-head to left.  
ΕΥΦΡ[ΑΝ]ΩΡΟΣ round Helios-head (3)  
225 ΕΠΙ ΕΥΦΡΑ<sup>1</sup>ΝΟΡΟΣ  
ΕΥΦΡΟΝΟ  
Ζ\*Μ\*\*\*ΟΥ<sup>1</sup> on the side IC in a small square stamp.  
ΕΠΙ ΙΕΡΕΩC<sup>1</sup> ηγΡωΝΟC a star to left Fig. 467, no. 5.  
ΗΔC<sup>1</sup> ΟΠΑ very doubtful large coarse letters  
230 ηδC<sup>1</sup>ΟΠΑ  
ΕΠΙ Η\*\*ΝΟΣ<sup>1</sup> ΔΑΛΙΟΥ  
ΗΡΑΙΑΡ in a rectangular panel [? abbreviation for ΗΡΑΚΛΕΙΤΟΥ | ΑΡΤΑΜΙΤΙΟΥ].  
\*\*\*\*\*| ΗΤΙΔΗ Helios-head to left.  
ΕΠΙ ΘΑΡ<sup>1</sup>ΣΙΠΟΛ  
235 ΕΠΙ ΘΑΡΣΙΠΟΛΙΟΥ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ  
ΕΠΙ ΘΑΡΣΙΠΟΛΙΟΦ (sic) ΥΑΚΙΝΘΙΟΥ round rose.  
ΕΠΙ ΘΑΡΣΙΠΟΛΙΟΥ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ the Θ's and Ο's very minute.  
ΘΕΜ\*\*\*\*\*| \*\*\*\*\*  
ΘΕΟ\*\*\*  
240 ΘΕΟΔΩΡ[ου]<sup>1</sup> ΘΕΥΔΑ[σιου]  
ΘΕCΜΟΦΟΡΙΟΥ ΘΕΟΚ<sup>1</sup> [last line badly stamped and quite illegible]. The name of the month reversed, the ΟΥ in the second line being at the right hand of the line and reading backwards (thus ΘΕΟΚ ΥΟ).  
[ ]<sup>1</sup> ΘΕΟΥ upper line illegible. Two lines on a seal ridged longitudinally, like the roof of a European house.  
ΕΠΙ[ ]<sup>1</sup> ΘΕΟ[υ να]<sup>1</sup>ΚΙΝΘ[ισυ]  
ΘΕΟΥ ΥΑ<sup>1</sup>ΚΙΝΘΙΟΥ  
245 ΕΠΙ ΘΕΡΣΑΝΔΡΟΥ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ  
ΕΠΙ ΘΕCα<sup>1</sup>ΓΟΡΟΣ  
ΘΕCΜΟκουΟΥ

- ΘΕΣΜΟ\*\*ΡΙΤΟΣ  
ΕΠΙ ΘΕΣΤΟΡΟΣ<sup>1</sup> ΣΜΙΝΘΙΟΥ
- 250 ΘΕΥΔΑΜ[ου]<sup>1</sup> ΑΡΤΑΜΙΤ[ιου]<sup>1</sup>  
ΘΕΥΔΩΡΟΥ<sup>1</sup> ΠΑΝΑΜΟΥ<sup>1</sup>  
ΕΠΙ ΘΕΥ<sup>1</sup>ΔΩΡΟΥ Helios-head to left.  
ΘΕΥΣΤ\*\*\* YAKINΘ round rose: the month-name in smaller letters.  
ΘΕΩνυμ in panel
- 255 Ο\*ΙΔΩΡΟΣ in a circle round a central boss (fig. 467, no. 24).  
ΕΠΙ ΟΡΑΣΥΔΑΜΟΥ<sup>1</sup> ΠΑΝΑΜΟΥ in very minute letters.  
ΕΠΙ ΙΑΚΙΡΙΑΤΕΥΣ  
[ ]<sup>1</sup> [ ] ΔΑ<sup>1</sup> [ ] ΟΥ  
ΙΕΡΟΤΕΛΕΥΣ in a circular stamp, boss in centre (fig. 467, no. 3).
- 260 ΙΕΡΩΝΟΣ with caduceus (2)  
ΕΠΙ ΙΕΡΩΝΟΣ ΑΡΑΜΙΤΙΟΥ (sic) round rose.  
ΕΠΙ ΙΕΡΩΝΟΣ<sup>1</sup> ΠΑΝΑΜΟΥ  
ΙΜΑ in large bold letters with caduceus.  
ΕΠΙ ιμα Α\*\*\*Ι<sup>1</sup> ΠΑΝΑμου
- 265 [ΙΝ?] \*ΟΝΟΣ in a rectangular panel.  
ΙΠΠΟΚΡΑΤΕΥΣ round rose found along with a seal of Aristodamos.  
ΙΣΙΟΣ stamped across the handle: not Rhodian.  
ΕΠΙ Κ\*\*\*\*\* ΣΜ(ΙΝΘΙΟΥ)  
]ΙCΤΡΟΥ
- 270 ΕΠΙ [ ]<sup>1</sup> ΚΑ[ ] Helios-head to left.  
ΚΑ\*\*\*\*\* ΚΑΡΝΕΙΟΣ round rose  
[Κ?] ΑΓΡΥΑ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
ΕΠΙ ΚΑΕΚΡΑΤΕΥΣ (sic) ΑΓΡΙΑΝΙΟΥ round rose: in addition a small square stamp bearing a rose on the side of the handle.  
]ΚΑΙΝΟΥ
- 275 ΕΠΙ ΚΑΛΛΙ<sup>1</sup>ΚΡΑΤΕΥΣ<sup>1</sup> ΣΜΙ[νθιου]  
ΕΠΙ ΚΑΛΛΙΚΡΑΤΙΔΑ round rose.  
ΕΠΙ καλλ]<sup>1</sup>κρατιΔΑ<sup>1</sup> \*\*\*\*\*ΟΥ  
ΕΠΙ ΚΑΛΛΙΚΡΑΤΙΔΑ ΑΡΤΑΜΙΤΙΟΥ round rose.  
ΕΠΙ ΚΑΛΛΙΚΡΑΤΙΔΑ ΑΓΡΙΑΝΙΟΥ round rose.
- 280 ΕΠΙ ΚΑΛΛΙΚΡΑΤΙΔΑ<sup>1</sup> ΠΑΝΑΜΟΥ  
ΕΠΙ ΚΑΛΛΙΚΡΑΤΙΔΑ ΠΑΝΑΜΟΥ round a circular stamp, with no device in the centre  
[επ]<sup>1</sup> ΚΑΛ<sup>1</sup>[λ.]ΚΡΑΤ  
ΚΑΜΩΝΟΣ a sword below (3).  
ΚΑΣΙΩΝΟΣ round rose.
- 285 ΚΕΡΙ in remarkable minuscule letters (fig. 467, no. 28).  
]ΚΙΝΟΥ<sup>1</sup> ]ΧΟΥ<sup>1</sup> [ ]  
ΚΑ\*\*\*\*\* round rose  
ΕΠΙ ΚΑΕ<sup>1</sup>ΑΡΧΟΥ in rectangular panel, the second Ε outside  
ΕΠΙ ΙΕΡΕΩΣ ΚΑΕΑΡΧΟΥ
- 290 ΕΠΙ ΚΑΕΑΡΧΟΥ ΑΓΡΙΑΝΙΟΥ round rose.  
\*\*\*\*<sup>1</sup> ΚΑΕΑ (for ]ΚΑΕΑ)

- ΕΠΙ ΚΛΕ[ΣΙ]ΚΡΑΤΕ[ΥΣ] [ΥΑ]Κ[ΙΝΘ]ΙΟΥ  
 \*\*\*\* ΚΛΕΥ  
 ΚΛΕΥΣ\*\*\*\*\*Ο\*\* round rose.
- 295 \*\*\*\* ΚΛΕΩ rose to left.  
 ΕΠΙ ΚΝΗΝΩΤΡΑΤΟΥ ΥΑΚΙΝΘΙΟΥ round Helios-head.  
 ]ΚΟΜ[ ] ] ΚΚ[ ] ] Θ[ευδαισιου  
 ΚΡ[ ] ] ΠΑΝ[αμου]  
 ΚΡΑΔΩΝΟΣ reversed, sword below (2).
- 300 ]ΚΡΑΤΕΥΣ ] ΘΕΣΜΟΦΟΡΙΟΥ  
 ΕΠΙ ΚΡΑΤΙΔΑΙ ΠΕΔΑΓΕΠΝΥΟ (2)  
 ΚΡΕΟΝΤΟΥ ΠΑΝΑΜΟΥ  
 ]Κ\*ΣΑΝ ] ΟΥ [va]ΚΙΝΘΙΟΥ  
 L IV (this is the whole inscription).
- 305 ΛΙΠ (the whole inscription).  
 ]ΛΜΗΔΟΥΣ ΔΑΛΙΟΥ  
 L ΝΥ\*\*\*\* ΟΥ\*\*\* (fig. 467, no. 2).  
 ΛCI reversed (the whole inscription).  
 ΕΠΙ ΛΥΚΑΙ \*\*\*ΝΙΚΑΙΣΙ \*\*\*ΝΟΥ (not Rhodian).
- 310 ] ΛΩΝΙΟΥ reversed (the seal has failed to make an impression of the top line).  
 ΛΩΝΙΟΥ reversed.  
 ΕΠΙ Μ\*\*\*\* ΔΑΛ[ΙΟΥ]  
 ΜΑΡΣΥΑΙ ΣΜΙΝΘΙΟΥ (2)  
 ΜΑΡΣΥΑΙ ΑΓΡΙΑΝΙΟΥ
- 315 ΜΕΝΕΚΡΑΤΕΥΣ (4)  
 ΜΕΝΕ[ΞΕ ]ΡΩΣ  
 ΜΕΝΩΝΟΙ ΘΕΥΔΑΙCΙΟΥ  
 ΜΕΝΩΝΟΙ ΠΑΝΑΜΟΥ  
 ΜΕΡ\*\*\*\* ΠΕ[ΤΑ]ΓΕΙΤ
- 320 ΜΗ on a small thin jar-handle the whole inscription.  
 ΜΙΔΑ caduceus under, 10sc to right (9). a stamp of *Arkhemvrotos* was also on one of these jars.  
 ΜΙΔΑΣΙ [ΑΓ??]οιανου??  
 ΜΙΚΥΟΥ ΟΕΥΔΑΙCΙ  
 ΜΙΚΥΟΥ ΔΙΟΣΟΥΟΥ
- 325 ΕΠΙ Μ\*\*\*ΟΥΣ \*\*\*\* ΘΙΟΥΣ  
 ΕΠΙ ΜΥΤΙΩΝΟC  
 ΕΠΙ ΜΥΤΙΩΝΟC ΔΑΛΙΟΣ  
 ΕΠΙ ΜΥΤΙΩΝΟC ΥΑΚΙΝΘΙΟΣ  
 \*\*\*\*ΜΕΙΔΑΣ 10sc above
- 330 ΝΑΝΙΟΥ  
 [Ν?]ΕΙΑ[Φ?] ΥΑΚΙΝΘΙ  
 ]ΝΕΥC ΣΜΙΝΘΙΟΥ  
 ΝΙΚΑΓΙΔΟΣ (2)  
 ΝΙΚΑΣΑΓ[ ] ]
- 335 επι ν]ΙΚΑΣ [αγορα]  
 ΕΠΙ ΝΙΚΑΣΑΓ round rose. On additional stamp .

- [ΕΠΙ ΝΙΚΑΣ]ΑΓΟΡΑ ΘΕΣΜΟΦΟΡΙΟΥ round rose.  
 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ<sup>1</sup> ΘΕΣΜΟΦΟΡΙΟΥ  
 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ<sup>1</sup> ΔΑΛΙΟΥ (5)  
 340 ΕΠΙ ΝΙΚΑΣ<sup>1</sup>ΑΓΟΡΑ<sup>1</sup> ΔΑΛΙΟΥ  
 ΕΠΙ ΝΙ[ΚΑ]<sup>1</sup>ΣΑΓΟΡΑ<sup>1</sup> ΔΑΛΙΟΥ  
 ΕΠΙ ΝΙΚΕΣΑΓΟΡΑ (sic)<sup>1</sup> ΔΑΛΙΟΥ  
 ΕΠΙ ΝΙΚΑΣΑ<sup>1</sup>ΓΟΡΑ<sup>1</sup> ΣΜΙΝΘΙΟΥ (3)  
 ΕΠΙ ΝΙΚ[ΑΣΑ]ΓΟΡ[Α]<sup>1</sup> ΣΜΙΝΘΙΟΥ  
 345 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ ΣΜΙΝΘΙΟΥ round rose (2).  
 ΕΠΙ ΝΙΚΑΣΑ<sup>1</sup>ΓΟΡΑ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ (8)  
 ΕΠΙ ΝΙΚΑΣΑΓΟ<sup>1</sup>ΡΑ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ in panel.  
 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ ΑΓΡΙΑΝΙΟΥ  
 ΕΠΙ ΝΙΚΑΣΑ<sup>1</sup>ΓΟΡΑ<sup>1</sup> ΑΓΡΙΑΝΙΟΥ (2)  
 350 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ ΥΑΚΙΝΘΙΟ round Helios-head.  
 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ Υ[ΑΚΙΝ]ΘΙΟΥ round rose.  
 ΕΠΙ ΝΙΚΑΣΑ<sup>1</sup>ΓΟΡΑ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ (7)  
 ΕΠΙ ΝΙΚΑΣΑ<sup>1</sup> ΥΑΚΙΝΘΙΟ  
 ΕΠΙ Νικασαγορα φιλανΙΟΥ round rose.  
 355 ΕΠΙ ΝΙΚΑΣΑ<sup>1</sup>ΓΟΡΑ<sup>1</sup> ΠΑΝΑΜΟΥ (11) (fig. 467, no. 22).  
 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ<sup>1</sup> ΠΑΝΑΜΟΥ  
 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ ΠΑΝΑΜΟΥ round rose.  
 ΝΙΚΑΣΑΓΟΡΑ<sup>1</sup> ΠΑΝΑΜΟΥ<sup>1</sup> ΔΕΥΤΕΡΟΥ reversed.  
 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ ΑΓΑ<sup>1</sup>ΘΕΡΟΥΔΟΥ on an associated stamp ΠΑΝΑ<sup>1</sup>ΜΟ\*ΟΥ  
 360 ΕΠΙ ΝΙΚΑΣΑΓΟΡΑ ΠΕΤΑΓΕΙΤΝΙΟΥ round rose (2). On one of the specimens  
 an additional stamp PK in monogram, reversed.  
 επι νικ]ΑΓΑ<sup>1</sup>[γορα<sup>1</sup> ]ΟΥ  
 ΝΙΚΑΣΙΜΑΧΟΣ  
 ΝΙΚΑΣΙΩΝΟΣ round rose.  
 ΝΙΚΙΑ in large letters.  
 365 ΕΠΙ ΝΙΚΩΝΟΣ round rose.  
 ΝΙ\*\*\*\*\*ΩΝΟΣ in a rectangle.  
 \*\*\*\*\*ΝΟΣ Κ(ιδ?)ΕΙΣΤΙ(ου ??) round rose, the second word in smaller letters.  
 ]ΝΟΥ ΥΑΚΙ[νθίου] reversed, round rose.  
 ]Ν\*\*ΙΥ ΥΑ<sup>1</sup>κινθΙΟΥ  
 370 ]Ξ<sup>1</sup>ΑΝ<sup>1</sup> [ ]ΟΥ<sup>1</sup> [φιλ]ΑΝΙΟΥ  
 ]ΞΑΡ<sup>1</sup>[ ]ΟΥ<sup>1</sup> [φιλ]ΑΝΙΟΥ  
 ΞΕΝοιΜΟΥ  
 ΕΠΙ ΞΕ<sup>1</sup>ΝΟΣΤΡΑ reversed, Helios-head to right.  
 ΕΠΙ ΞΕΝΟΦΑΝΕΥΣ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
 375 ΕΠΙ ΞΕΝΟ<sup>1</sup>ΦΑΝΤΟΥ  
 ΕΠΙ ]ΞΕ<sup>1</sup>ΝΟΦΑ<sup>1</sup>ΝΤΟ[Υ] Helios-head to left (fig. 467, no. 16). Another specimen  
 without the Helios-head.  
 ]ΟΙΟ[  
 ΟΛΥΜΠΙΟΥ torch to right.  
 ΟΛΥΜΠΟΥ rose to right.  
 380 ]ΟΜΑΧΟΥ ΠΑΝΑΜΟΥ round rose.

- ]ΟΜΑΧΟΥ ΠΑΝΑΜΟΥ ΔΕΥΤΕΡΟΥ round rose.  
 ΟΝΑΣΙΟΙΚΟΥ (3)  
 ]ΟΝΟ[  
 ΕΠΙ \*\*ΟΝΟΣΥ Α[*ρταμιτιο*]Υ round rose.
- 385 ]ΟΧΙΑ[ round rose.  
 ΠΑ[ ]<sup>1</sup> ]<sup>1</sup> ΥΑ[*κινθιον*?]  
 ΠΑ\*ΙΩΝ<sup>1</sup> ΚΑΡΝΕΙΟΥ in a panel of oblique lines.  
 ΠΑΝΑ in heart-shaped stamp like Fig. 467, no. 2 (2).  
 ]ΠΑΝ[*αμου*]<sup>1</sup> ΔΕ[*υτερου*] crossed by short oblique strokes.
- 390 ΠΑΥΣΑΝΙΑ  
 ΕΠΙ ΠΑΥ<sup>1</sup>ΣΑΝΙΑ in a rectangle. Helios-head to left.  
 [επι πα]ΥΣΑΝΙΑ<sup>1</sup> [βαδρ]ΟΜΙΟΥ  
 ΕΠΙ ΠΑΥ<sup>1</sup>ΣΑΝΙΑ<sup>1</sup> ΣΜΙΝΘΙΟΥ  
 ΕΠΙ ΠΑΥ<sup>1</sup>ΣΑΝΙΑ ΑΡΤΑΜΙΤΙΟΥ
- 395 ΕΠΙ ΠΑΥΣΑ<sup>1</sup>ΝΙΑ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ  
 [ΕΠΙ ΠΑΥ]ΣΑΝΙΑ ΠΑΝ[ΑΜΟΥ] round rose.  
 ΠΑΦ<sup>1</sup> in large letters · not a Rhodian handle (fig. 467, no. 19).  
 ΕΠΙ ΠΑΧ<sup>1</sup>ΚΡΑΤΕΥΣ [ΑΡΤΑΜΙ]ΤΙΟΥ  
 ΕΠΙ ΠΕΡΧΟ<sup>1</sup> [ ]<sup>1</sup> [ ]
- 400 ΠΙΝ\*ΟΓΙΝΟΣ caduceus below. (The first letter might be Η.)  
 ΠΟΛΥΧΑΡΜΟΥ a star above the ΥΧ.  
 ΠΟΛΥΧΑΡΜΟΥ not a Rhodian handle.  
 ΕΠΙ ΠΡΑΤΟΦΑΝΕΥΣ<sup>1</sup> ΠΑΝΑΜΟΥ round rose.  
 ΕΠΙ ΠΡΑ[*τοφαν*]<sup>1</sup>ΕΥΣ<sup>1</sup> ΠΑ[*ναμου*]
- 405 [ΕΠΙ] ΠΥΘΟ<sup>1</sup>ΔΩΡΟ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
 ΠΥΘΟΓΕΝ\*\*\* round rose.  
 ΡΑ\*\*\*\*\*<sup>1</sup> [ΘΑ]ΣΙΩΝ (fig. 467, no. 11).  
 ΕΠΙ [ΡΑ?]ΣΤΙΑΡΧΟΣ<sup>1</sup> ΔΑ[*λιου*] in very minute letters.  
 \*ΡΕ\*Α:ΔΙΚ
- 410 ΕΠ[ε ]<sup>1</sup> ΡΕ[ ]<sup>1</sup> | ΚΑ[ ]<sup>1</sup>  
 ΡΟΔΩΝΟΣ a sword above (2).  
 ]ΡΟΥ[ ]<sup>1</sup>Υ  
 ]ΡΥC[ ]<sup>1</sup> round circular centre without device.  
 ]Σ
- 415 ]<sup>1</sup> ΣΑΡΑΝ\*\* Helios-head to left.  
 ΕΠΙ \*\*\*ΣΑ'ΧΕΡΑ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ  
 ΣΑΤΥΡΟΥ not Rhodian.  
 ]ΣΑΩ[Ε?] round rose  
 ΕΠΙ \*\*\*<sup>1</sup> ΣΕΜΟΧΟΥ<sup>1</sup> ΥΑΚΙΝΘΙΟΥ
- 420 ΣΙΜΟΥ  
 ΕΠΙ \*\*\*\* ΣΙΜΥ<sup>1</sup> ΔΑΛΙΟΥ  
 επι σι[*Μυ*]<sup>1</sup> ΛΙ[*νου*]<sup>1</sup> ΑΡΤΑΜ[*τιου*]  
 ΕΠΙ CΙΜΥ<sup>1</sup> ΛΙΝΟΥ  
 ΣΙΡΙΟΥ not Rhodian (fig. 467, no 14).

<sup>1</sup> Not ΑΠΑΤΟΦΑΝΕΥΣ.

- 425 ]ΣΜΙΝΘ[<sub>100</sub>  
 ]σμινθ[<sub>10</sub> round rose.  
 ΕΠΙ Σ[ΘΘΙ?]ΚΡΑΤΟΥ  
 ΕΠΙ \*\*\*ΣΟΥ ΠΕΔΑ<sup>1</sup> ΓΕΙΤΝΟΥ  
 \*ΣΤ[<sub>1</sub> round rose.
- 430 ΕΠΙ Σ\*\*\*\*Υ ΑΡΤΑΜΙΤΙΟΥ  
 ΕΠΙ ΣΥΜΜΑΧΟΥ<sup>1</sup> ΘΕΣΜΟΦΟΡΙΟΣ  
 CYK on a wide rather flat handle of compact reddish ware (fig. 467, no. 15).  
 ΕΠΙ ΣΩΔΑΜΟΥ ΥΑΚΙΝΘΙΟΥ  
 ΕΠΙ ΣΩΔΙΜΟΥ ΥΑΚΙΝΥ reversed, round rose.
- 435 ΣΩΚΡΑΤΕΥΣ toich to right (10).  
 ΣΩΚΡΑ<sup>1</sup> ΑΓΡΙΑΝΙ  
 ΣΩΣΙΑΑ in large bold letters.  
 ΣΩΤΗΡΙΧΟΣ round flying bird (4).  
 ΕΠΙ Τ[ ] round rose: additional stamp ©.
- 440 ΤΑΝΩΝΟΣ<sup>1</sup> ΠΑΝΑΜΟΥ  
 ]ΤΙΑΔΑ[ ]ΟΥ  
 ΤΙΜΑΚΡΑΣΕΥΣ  
 ΕΠΙ | ΤΙΜΑΣΑΓΟΡΑ<sup>1</sup> ΒΑΔΡΟΜΙΟΥ  
 ΤΙΜΟΘΕΟΥ round rose (4).
- 445 ΕΠΙ ΤΙΜΟ<sup>1</sup>θεου Helios-head to left.  
 ΕΠΙ ΤΙΜΟΘΕΥΣ<sup>1</sup> ΘΕΣΜΟΦΟΡΙΟΥ  
 ΕΠΙ ΤΙΜΟΘΕΟΥ ΘΕΣΜΟΦΟΡΙΟΥ round rose.  
 ΕΠΙ ΤΙΜΟΘΕΟΥ ΔΑΛΙΟΥ round Helios-head (2).  
 ΕΠΙ ΤΙΜΟ<sup>1</sup>ΘΕΟΥ ΔΑΛΙΟΥ
- 450 ΕΠΙ ΙΕΡΕΩΣ ΤΙΜΟΚΛΕΑ round rose, reversed.  
 ΕΠΙ ΤΙΜΟΚΛΕΙΔΑ ΑΡΤΑΜΙΤΙΟΥ round a trident with a streamer on the stem.  
 Fig. 467, no. 9.  
 [ΤΙΜ?]ΟΚΡΑΤΕΥΣ round rose.  
 ΤΙΜΟΞΕΝΟΥ round rose (9) One with additional stamp [C].  
 ΕΠΙ ΤΙΣΑΓΟΡΑ<sup>1</sup> ΠΕΔΑΓΕΙΤΝΙΟΥ
- 455 ΕΠΙ<sup>1</sup> \*\*\*ΤΟΡΟΣ<sup>1</sup> [ ]  
 [ ] ΤΡΑΤΟΥ<sup>1</sup> [ ] ΙΟΥ  
 ΕΠΙ Τ[ ] ΠΑΣΜΙ[ ]  
 ΕΠΙ \*ΤΥΜπ\*\*\* round rose.  
 ΕΠΙ Τ\*\*ω|Α\*\*\*ΓΜΙ\*ΟΥ<sup>1</sup> ΑΡΤΑΜΙΤΙΟΥ
- 460 να]ΚΙΝΘΙΟΥ round rose.  
 [ΥΦΡ[ ] ΟΥ<sup>1</sup> [ ] ΟΥ  
 ΕΠΙ \*\*\*\*ΦΑΝΟΥ round rose.  
 ΦΙΛΑΙΝΙΟΥ (3): one with caduceus before the name.  
 ΕΠΙ ΦΙΛ<sup>1</sup>ΝΙΔΑ Helios-head prefixed to first line.
- 465 ΕΠΙ ΦΙΛ<sup>1</sup>ΝΙΔΑ (2). Different stamps, though lettering disposed the same way.  
 φιλοΞΕΝΟΥ round rose.  
 ΧΑΜΟC round rose. The seal is much chipped, but there never were any other letters. all are, however, uncertain except the X.  
 ΕΠΙ ΧΑΡΜΟΚΛΕΥΣ



ΕΠΙ \*\*[ΧΘ?]ΑΔΑ<sup>1</sup> *app.*ΑΝΙΟΥ

470 ]ΩΝΟΣ, anchor below. The Ω doubtful.

Ω  
ΙΗ } with something undecipherable underneath. (Fig. 467, no. 25.)

Illegible (fig. 467, no. 18).

Rose and caduceus in rectangular stamp without inscription (5).

A pattern of zigzags, without inscription (fig. 467, no. 23)

475 A rose without inscription (fig. 467, no. 27).

A quality-mark (?) with characters resembling the Hebrew letters נמ (fig. 467, no. 26).

Although the handles here enumerated are foreign intrusions, a few notes on the foregoing list will not be out of place. The preponderance of certain names will be noticed—of the governors Arkhembrotos and Nikasagoras, and of the energetic merchant Eukleitos, whose wares have been found far and wide over the Eastern Mediterranean basin. The happy accident of the discovery of one pair of jar-handles fitting together on to one amphora shewed that Eukleitos worked under Nikasagoras, and thus we have an explanation of the especial frequency of the latter name. A large proportion of the jar-handles with this name were found in the Maccabaeon Castle

As a rule the merchant's name occupies one stamp, the governor's, with the month, the other. The governor's name is distinguished by the prefixed preposition *ἐν*, in the case of ΠΑΥΣΑΝΙΑ, which is found both with and without the prefix we are probably to understand two persons, one governor, the other merchant. The merchant Agatheroudos, however, placed his name with the governor's, and had the month alone on a separate seal: he appears twice, under Nikasagoras and Aristakos. Probably the seal with *Ἀγριαῖον* alone on it belongs to him: it has a star in the same place as his seal of the month Panamos [Deuteros?], which is on the same jar as that bearing the name of Nikasagoras. In the same sense is to be understood the name *Agimo*, found on one of the Andria handles, and that of N...manto, which belongs to the eponymy of a priest Ap...des.

The last named is remarkable for the omission of the preposition and the use of the nominative case throughout. Usually the priest-names are prefixed by the formula *ἐν* [not *ἐφ*] *ιερέως*: in one case we find *ἐπὶ ἱερέως*.

The majority of the handles come from Rhodes, but it is interesting to note that a much larger proportion than in the Tell Sandahannah series have a different provenance. Two—nos 6 and 11 in the figure—are indicated as from Thasos; it is regrettable that both of these are much injured. There is another small series of flat handles of red ware—a strong contrast to the Rhodian cylindrical handles with a dark cream-coloured slip—bearing an inscription usually transverse across the upper attachment. Such a handle is fig. 467, no. 1, with the inscription (reversed) ΔΙΟΝΥΣ, in this case the stamp is not transverse. Similar handles are those bearing the long inscription, which I do not understand, no. 12: and those inscribed ΙCΙΟC, [ΠΟΛΥ]ΧΑΡΜΟΥ, ΣΑΤΥΡΟΥ, ΣΙΜΟΥ, ΣΙΠΙΟΥ, ΤΕΥΟΤΕΑΕΥΣ, ... ΑΝΟΥ.

Some of the handles bear inscriptions difficult to comprehend. Besides the three-line inscription referred to, I may mention ΔΝΡΟΘΕΟ ΤΟΥ ΜΩΓΗΤ, which perhaps gives some information about the parentage of the person mentioned; ΗΡΑΙΑΡ, perhaps, as suggested in the list, an abbreviation, ΛΝΥ..., which is certainly the reading, where the initial character is not easy to deal with, and, most interesting of all, the inscription ΔΙΦΟΙΝΥCIC ΜΑΝΙΤΟC, which preserves the digamma.

A few handles, indicated in the catalogue, have additional marks, probably denoting the quality of the wine that the jars once contained

Further observations, such as a discussion of the devices and the distribution of individual stamps, would scarcely be in place in this work, but would be more suitable in a separate treatise on Greek pottery stamps.

The stamp shewn in fig. 467, no 21, with a monogram, is of later date: it was found in one of the fields around the modern village. This is a type of stamp well known in the Byzantine Period.

Besides these inscriptions, the use of the Greek alphabet and language (see p. 176 for a list of the examples), and the obvious traces of Greek pottery forms in the local ware of the Hellenistic Period, afford direct evidence of intercourse with the Greek civilization of the period. Indeed, the preponderance of the Greek script, in the few specimens of writing that the Hellenistic stratum yielded, shewed that Greek was spoken at least as much as any Semitic dialect in the city during the latest phase of its existence. The excavations elsewhere, notably at Tell Sandahannah, gave analogous results; though we are perhaps led to expect an even greater proportion of Greek at Gezer owing to the historical fact that it remained an outpost of the Hellenizing party for some time after the successes elsewhere of the reactionaries.

That there was at least one building, probably a temple, designed on classical models was shewn by the fragment of an Ionic volute found in the Central Reservoir; this building, however, had otherwise been rooted out of existence, as we might expect from the account of the capture and purgation of the city by Simon Maccabaeus (see Vol. I, p. 34). That some at least of the Greek pantheon were honoured is shown by the invocation to Heracles on the altar of Eunêlos (*post*, p. 441); that the civic institutions were founded on Greek models is sufficiently indicated by the weight of "Sosipatros, the ruler of the *agora*" (*ante*, p. 287). The pottery and figurines of classical or sub-classical origin have already been described: see pp. 212, 234, *ante*.

## CHAPTER IX

### WARFARE

#### § 41.—THE STRATEGIC POSITION OF GEZER: BATTLES AND THEIR TRACES

THE situation of Gezer, on two important trade-routes, while advantageous for the development of the city's importance, was also in itself a source of constant anxiety to the population. Greedy neighbours might well cast envious eyes on the opportunity such a situation presented for plundering caravans as they passed, and the owners of the caravans themselves might fairly view with no friendly feelings the city which was a constant menace to their property. A city so placed would need to be prepared to stand such sieges as we know Gezer actually underwent, and would require walls for its protection, scouting stations for its warning, stores of food and water sufficient to maintain the population, and a plentiful arsenal or weapons and ammunition for offence and for defence.

The city walls, and the food and water stores, have already been described in Chapter IV, and it is not necessary to return to them here. We may content ourselves with this passing mention, referring the reader back to the description of these constructions and their history which will be found in the place indicated.

*Scouting Stations.*—In Chapter I we have already referred to the remarkably favourable strategic position of the city—a fact that forcibly struck military authorities such as the late Sir C. Wilson, who visited the works during the excavation. This must now be described more at length

About the N.E. corner of the city is the foundation of an enormous tower, built of very large stones. The complete excavation of this building was made impossible by the *wely*, built right above it, and by the graves of the village clustered around; it was just possible to expose one angle. This tower evidently belonged to the inner city wall; but as no ancient buildings seem to have been erected over it, it may well have been preserved by the later inhabitants on account of the extensive view that its top would command to the north and west. Some idea of the area overlooked

can be obtained by mounting to the roof of the *wely*, which would probably be about the same level as the top of the old tower. Carmel, seventy miles away, can easily be discerned on a clear day, as well as the nearer mountains of Nablus: and villages at a distance of 20 or 30 miles can be detected with little difficulty. To the west the whole plain to the sea is visible from this point of vantage; and the trained eye of a scout could from far away see the movements of hostile armies or of trading caravans.

Eastward, it is true, the situation presents no such exceptional advantages. In about two or three miles the view in this direction is shut in by the great wall of the Judæan mountains. Southward also the hills immediately south of the city absolutely prevent a view of the plain in that direction.

But there is reason to believe that the inhabitants of the city were prepared to scout in the latter direction also. About 25 minutes' walk to the S.E. there is an elevation, the highest in the immediate neighbourhood, bearing on its summit a *wely* called by the suggestive name of Sheikh Mûsa Talî'a, or "Sheikh Mûsa (Moses) the Watchman." The people have a tradition, recovered by Clermont-Ganneau, that this Mûsa was a watchman set to watch the manœuvres of the Christians (*i.e.* the Crusaders), and killed by them at his post. This is probably a lingering recollection of the use of the structures, the traces of which still remain on the hilltop.

Sheikh Mûsa Talî'a is a conical, rocky hill, its summit 830' above the sea, according to the P.E.F. survey, and consequently nearly 100' higher than the mound of Gezer itself. Its slopes are free, or nearly so, on the N, W. and E. sides; on the S. it is prolonged by a *col* into a long ridge a little lower than itself. The sides, especially on the N, are strewn with large boulders, that look as though they had been rolled down from the summit. The top of the hill, which is shewn in fig. 468, is a level platform, surrounded by the foundation of a wall enclosing a circular space 124' in internal diameter. The low mound which represents the wall is about 15' thick: this, however, by no means shews that the wall was so thick, the thickness being no doubt made up by earth and stones fallen from the upper courses of the wall. Inside the wall is an inner ring of loose stones lying on the ground, perhaps fallen from the wall at any rate later in date. The area is bare rock in places, and nowhere has any great depth of earth covering it. Almost in the middle is a cistern, beside which is lying, upside down, the marble Byzantine capital which has already been figured in Vol. I, p. 205, fig. 95.\* The surrounding

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\* It measures 3' 2" × 2' 3" × 1' 1½" high, the two narrow sides have a pattern of acanthus leaves, in the centre of the design is a cross, which has, however, been battered away. The capital has been hollowed to serve as a well-head, and the inner surface of the hollow is worn with rope-marks.

wall is interrupted on the E. side by the Sheikh's tomb and the ruined domed *wely*, a plain building of the ordinary kind. Its *mihrab* contains a number of pots and other odds-and-ends of offerings. A fine olive tree grows over the tomb. There is a small Arab cemetery N.E. of the enclosure. Some scraps of pottery lie strewn on the earth, and seem to indicate that people were established here. The plain is commanded for a distance of  $16\frac{1}{2}$  miles, the minaret of 'Asdûd being distinctly visible against the sky.



FIG. 468.—SUMMIT OF SHEIKH MÛSA TALĪ'A

*Traces of Battles.*—I describe here, because I know not where else in the book to insert the description, a discovery made in **III 20 A**. This is a bank of earth, baked by some means almost to the hardness of a brick, about 1'-2' in breadth and 7' in length. In it were embedded eleven human skulls, a number of long bones, splintered, and also a quantity of cows' teeth. These had been piled up interspersed with a number of stones and a quantity of potsherds. The earth was so very hard that it was with difficulty broken by the pickaxe; but it was by no means obvious how it had become cemented to such a condition. The bones

were all rotten and broken, and could not be removed except in small fragments, useless for scientific purposes.\* What manner of Bluebeard's Castle this house may have been there was nothing to show. I thought at one time that the mound might have been an earth-altar,† in connection with the neighbouring High Place; and the fact that a passage leads from the courtyard directly into the High Place makes it not impossible that the dwelling may have been in some way connected with the sanctuary. But the mound of skulls is rather too far away to be radically connected with the alignment; and some other explanation is probably preferable. It looks more like some savage trophy, like the spikes ornamented with heads surrounding the castles of our nursery tales, or, not to travel beyond the realm of history and the territory of Palestine, like the heads of Ahab's seventy sons heaped up at the gate of Jezreel (2 Kings x 9).

A similar problem is raised by the cistern in the pit E. of VI 1. This is in the middle of a house I have assigned to the Hellenistic Period, principally because one of its chambers, marked *r*, is cemented and turned into a reservoir. It may be that this is really of older date (Fourth Semitic) and the reservoir is a later adaptation. However that may be, the cistern, which is of unusual depth—26'—and 14' across at the bottom, contained a remarkable number of human skulls, and no other bones, shewing that the heads had been severed and thrown in. What was still more remarkable was that most of the skulls were those of persons under twenty. It is to be noticed that the house to which this cistern belongs is close to the E. end of the wall, near the outcrop of rock where, in discussing the city walls, we suggested that there might at one time have been a city gate. If so, this would be one of the first houses to be attacked in case of a successful storming of the city, and it may be that these heads are the record of some savage raid: or of a rebellion within the walls of the city itself, wherein the house of the ruling Governor was rooted out. Again we are reminded, by the age of the victims, of the story of the children of Ahab.

Round the walls, especially in the neighbourhood of the gates, were

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\* Some of them might have been measured *in situ*, before an attempt was made to remove them, had the discovery been made at any other time than the middle fortnight in May. The reason for this is the fact that (no doubt to a large extent owing to the rich water supply of the neighbourhood) the air of the district in which Abū Shūseh is situated is at that time of the year laden with countless swarms of tiny sand-flies. With the best will in the world to rise superior to petty annoyances, it is a sheer impossibility to secure measurements accurate to a millimetre when one is surrounded by clouds of these irritating atoms, attacking, with their little pin-pricks of stings, the most vulnerable spots in one's eyes, ears, and nostrils!

† The suggestion was made in *Bible Sidelights*.

found many arrow-heads in bronze and in iron. These probably tell of skirmishes. The breach in the walls and the pits full of bones have already been spoken of in previous pages of this book (see Vol. I, pp. 248, 343).

§ 42.—WEAPONS OF OFFENCE AND DEFENCE

*Throwing-stones.*—The most primitive weapons of offence are stones cast with the hand, and the stores of small round stones found in most of the caves were probably provided for the reception of hostile intruders.

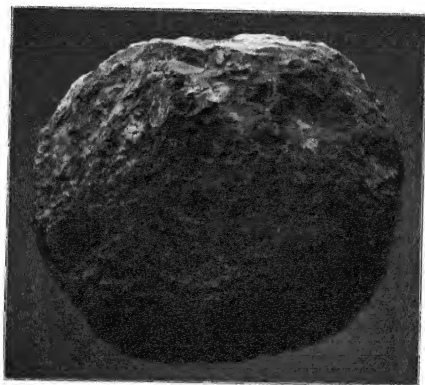


FIG. 469.—BALLISTA BALL

There is sufficient and well-known literary evidence in the Hebrew Scriptures of the use of stones as weapons or as instruments of execution, cast either with the hand or with slings. Sling-balls, blocks of limestone or flint, spherical or cubical with rounded edges, about 2" in diameter—were common throughout. The most remarkable pile of these was stored inside the Maccabaeen gateway near the Castle of Simon.

*Ballista Balls.*—Some form of ballista, for the casting of larger stones, must have been in use from an early period, if we may judge from the depth at which missiles prepared for such engines were found. These missiles are of stone, spherical, about the size of a small cannon-ball, and

of considerable weight—far too heavy to be thrown by unaided human muscles. Though commonest in the later strata, they are not unknown even in the Second Semitic Period. One such was found in the rock in trench 6. A good specimen of such balls is shewn in fig. 469.

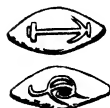


FIG 470  
LEADEN GLANS

Such rudimentary missiles, though in frequent use, were not the most important of the offensive weapons at the disposal of the Gezerites. We can say nothing of the firebrands and other perishable objects, which the graphic representation of the siege of Lachish by Sennacherib shews to have been in use, to cast down on besieging foes. Many weapons, or rather the heads and blades of weapons of bronze and iron, and in a lesser degree flint

and bone, have survived, to shew that Gezer was well equipped with arrows, javelins, spears, swords, daggers, and battle-axes, all of which require a few words of description.

*Glans.*—Glans or sling-bullets of lead or clay were sometimes found. They are elliptical, pointed at each end. One of lead found outside the outer wall at the S. end of trench 30 had a figure of a serpent stamped upon it (fig. 470). Elsewhere another was found, stamped on both sides with a rosette. Most of those found, however, were of hard compact clay; or else were pebbles, triangular in cross section, and pointed at both ends. This shape was probably natural, but used for a similar purpose to the artificial bullets. As a rule these missiles were confined to the two latest strata.

*Mace-heads.*—These egg-shaped perforated balls of stone—usually quartzite, or some such white stone, but sometimes of a black colour, were fairly plentiful in the excavation. They are commonest in the earlier strata, being most frequent in the Second Semitic Period, though they appear in the Third and Fourth also. They are usually  $1\frac{1}{2}$ " to  $2\frac{1}{2}$ " in length. In the Hellenistic Period they are unknown. Good typical specimens will be found in Pl xxviii, figs. 1-3. Another (fig. 471) is peculiar in having the perforation unfinished; its total length is  $1\frac{3}{4}$ ", but the perforation is only  $\frac{7}{8}$ " long. This was found above the Crematorium in the Third Semitic stratum. Unfinished specimens shew that the hole was bored with a tubular drill.



FIG. 471  
MACE-HEAD

The white-coloured mace-heads are not always of hard stone; a lime-



stone example was found in the cast rubbish between the two city walls north of the High Place alignment. This was probably for ceremonial rather than for military purposes.

*Arrow-heads* were made of flint or of bronze down to the Fourth Semitic Period. In this period flint-heads almost disappear (though the fine flint arrow-head Pl. ccxv,\* fig. 73 was found in trench 28 just under the surface), and iron is introduced, though bronze still remains the commonest material. In the Hellenistic Period iron arrow-heads are commoner in proportion to bronze than before, but the manufacture of those in iron lags behind the bronze. The iron arrow-heads, as a rule, remain of the old types, whereas new forms are developed in those made by the more tractable bronze. In the Hellenistic Period a few are found of bone, probably intended for hunting rather than for military use.

The arrow-heads of flint are seldom anything more than small pointed oval chips, very roughly formed. Only two or three were found in which any excess of care had been spent on their manufacture.

The form of bronze arrow-heads throughout the Semitic Periods is in essence uniform, though, as will be shewn, it is capable of a good deal of variety in detail. It is a blade, oval or leaf-shaped, with a tang projecting from the butt end. It is impossible to detect any evidence of chronological developments in the different varieties of this type, arrow-heads of remarkably different shapes and proportions are found together in the same stratum, and even in the same spot.

The following are the details in which the shape of the arrow-heads vary.

(1) The shape of the blade, which is a pointed oval in the majority, though as a comparison of fig. 1 [III 18] with fig. 8 [III 18] or fig. 20 [V 4] will show there is a considerable variety in the proportion of length to breadth. Fig. 54, from III 28, is of quite abnormal breadth. Other less common varieties are the lozenge-shaped blades of figs. 2 [V 4], 9 [IV 4], which pass into the triangular blade of figs. 15 [II 14], 18 [II 28], 30 [VI 16].

As a rule the cross-section of the arrow-head blade is a uniform oval, but in a fairly numerous minority there is a ridge, more or less faint, running from the base of the tang to the tip. This, however, is much less common in arrow-heads than in javelin-heads (as figs. 25, 26), and in the smallest bronze arrow-heads is seldom if ever found. Figs. 24, 27-29 are examples of the chisel-ended arrow-head which is not uncommon; the last of these is an extreme case. Fig. 27 is from III 27; 28 from V 28; 29 from IV 28.

The length of the tang in proportion to the blade is another source of variation. In the normal type the tang is a little shorter than the blade. Sometimes, however, the tang is so much absorbed in the base of the blade as almost to disappear, as in fig. 3 [III 19]; in others, on the other hand, the tang is greatly exaggerated in

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\* Reference throughout the paragraphs on Arrow-heads is to Plate ccxv.

length, the blade being simply an insignificant expansion at its end. Fig. 2 is an example of this

Again, there is some variety in the treatment of the junction between blade and tang. In some the one passes imperceptibly into the other, as in fig. 3, or in 4 [waste earth]: this is perhaps the commonest. A change of curvature is seen in figs 5 [III 15], 6 [III]. Slight shoulders appear in fig 7 [VI 4], which become pronounced in figs 8 or 10 [V 14] and well marked in fig. 11 [V 3]. Stop-knobs, to prevent the arrow-head from sinking too far into the wooden stems, are not often found, but sometimes a ridge is to be seen crossing the tang just at its junction with the blade, as in fig. 12 [IV 4], and perhaps more commonly a knob is made on the tang itself at its upper end or middle, as in figs 13 [V 20], 14 [V].

Further, the shape of the tang is liable to modification. It may be square (fig 15), lozenge-shaped (fig 16) [V 4], or circular (fig. 17) [IV 18], when not, as in the majority, a flat rectangle of the same thickness as the blade. In fig 19 [III 19] is the not very common case of a square tang with chamfered edges. The tang terminates either bluntly (fig. 20), or, more commonly, in a sharp point, most commonly a taper (fig. 21) [V 4], but sometimes a chisel point (fig. 22) [II 15]. The case of a tang *expanding* downwards is, as might be expected, rare: fig. 17 is an example in which the tang is broadest at the bottom; in fig 23 [III 19] it is thickest in the middle.

In the Fourth Semitic Period new forms begin to appear. The earliest of these is the ogee head, which makes its appearance at this time: examples are shewn in figs. 34 [VI 15], 35, from waste earth. In these the tip is sometimes drawn out extravagantly long, till it is almost indistinguishable in appearance from the tang.

In the Hellenistic Period three important new forms are introduced, though by no means to the exclusion of those which have gone before. These are the barbed arrow-heads, the socketed arrow-heads, and the arrow-heads with three wings. The first of these are often very fine pieces of workmanship, with two neatly made barbs between which is a pointed tang, often of extravagant length. This type of arrow-head is frequently ribbed, and there is generally a stop-knob or a stop-ridge at the junction of tang and blade. The blade is either triangular or of a graceful ogee shape. Specimens of various degrees of excellence of workmanship will be seen in figs. 31-33, 38, 39. Of these 33 was found in V 28. It is an early example, and will be seen to have no ribbing or stop. The ribbing is usually a prominent feature of this type of arrow-head, though it is rarely so elaborate as in 39. This latter, however, is of rather a different type from the others, the barbs being less prominent and the head more triangular. It is from a rather deeper level than the rest, being perhaps of the Persian Period. The socketed arrow-head, a good example of which is shown in fig. 36 [VI 15], is an oval blade with a strongly marked ridge, hollowed to allow of the insertion of a pointed shaft. Fig. 37 differs in the treatment of the shaft; it is from VI 28. The three-winged arrow-heads are similar to this, but have three wings instead of two, making angles of 120° with one another. An example is shewn in fig. 40. Others, with thinner "wings," are fairly common. They are strictly confined to the Hellenistic Period.

A few exceptional forms must be mentioned before we pass to the iron heads.

Fig. 41, with its high-waisted lozenge-shaped blade and telescope-like shouldered tang, is from the Fourth Semitic Period. Such long tangs are rare before the Hellenistic. Fig. 42 is also Fourth Semitic; it is another example of great disproportion between blade and tang, to the disadvantage of the former, an extreme use of which appears in the minute example 47 [II 17]. Note also in fig. 42 the bulbous shape of the tang. Fig. 43 is an altogether peculiar example in which the tang is formed by twisting a tail on to the butt end of the blade. Fig. 44, from the Fourth Semitic Period, is remarkable for its broad flat ridge: 45 [VI 9] is a curious little arrow-head with a triangular blade having shallow depressions in the sides. Fig. 46 is a singular example from the early Fourth Semitic Period: it was found above the inner city wall at the S. end of trench 28. The thickening of the chisel-edged tang beyond the face of the blade is quite unusual. Fig. 48 from III a 29 is of a remarkable shape, with a very slightly projecting blade mounted on a long thick tang. Another curiosity is fig. 49, with the angles at the base of the point taking the place of the usual gentle curves; it is from III 19. Fig. 50 [III a 30] has an exceptionally prominent stop-ridge; note also its ogee blade, which is not commonly found so early. Fig. 51, from VI 27, has the tang looped up—perhaps a mere accident. Fig. 52, another example with ogee blade, from V a 28, is remarkable for the breadth of its tang. I have added fig. 53 as an example of what is frequently found—an arrow that has evidently found its billet in something hard, which has turned the point. This graphically brings before us the actualities of warfare, and the force with which such missiles could be projected from a bow with a good spring.

I may here allude to a javelin-head resembling no. 4, but with the tang missing, which was found in V 28. This is remarkable for having a deep groove all round the edge of the weapon. It can hardly be anything but a piece of faulty casting, the two halves of the head not being perfectly fused together, but shrunk away from each other in the mould.

Turning now to the iron arrow-heads, which, as we have already mentioned, are confined to the Fourth Semitic and Hellenistic Periods, especially the latter, we find by far the commonest form to be that of fig. 55, which, as we have already seen, is also the normal type of the bronze weapons. Figs. 57, 58, 59 are varieties of this, as is also the minute specimen fig. 61. Fig. 64 is a peculiar specimen, with clumsy bulbous tang. Fig. 66 is a graceful form, also found in bronze, where the blade is a flat oval in section; this form is unusual in iron. Quite exceptional are fig. 68, from VI II, the barbed arrow-head 74, and the shouldered head 75. The latter seems to be perfect. Occasionally arrow-heads with but one barb were found, but I could not definitely decide whether these were perfect or broken. They resembled a half of fig. 74, but as a rule were rather larger.

Fig. 63 is a lozenge-shaped blade mounted on a flat tang of disproportionate length. Similar arrow-heads with triangular blades are also found.

A few three-winged arrow-heads in iron were found, but these were rare. The rule was, I think, invariable that three-winged arrow-heads in bronze were socketed, those in iron tanged. Fig. 62 is an example. Allied to these were the pyramidal heads, which were found exclusively in iron. Fig. 67 was the normal shape. fig. 56

represents one example found with little barbs at the ends of the angles of the pyramid.

These further develop into blunt club-headed arrow-points, which may be either four-sided (as in fig 60), or elliptical (as 65). There were adapted for hitting a heavy blow rather than making a wound. They were found in bronze in tomb 30, but not elsewhere: see Pl. lxxv, figs 19, 20.

In figs. 69-72 four specimens of the rare bone arrow-heads are given—all, like most of the iron (and all of the exceptional iron) arrow-heads, from the Hellenistic stratum—except the tangless specimen 72, which comes from V a 28. They are evidently imitations, so far as the nature of the material will permit, of the normal form. In fig. 69 [VI 10], an attempt seems to have been made to provide the arrow-head with barbs. Fig. 73 is an unusually good specimen of a flint arrow-head.

A curious object found in 20 III, and illustrated in fig. 472, resembles two arrow-heads joined at the tip of the tang. This would suggest that arrow-heads were cast thus in pairs and afterwards cut asunder—which is improbable, but I cannot otherwise account for the object. No moulds were found for casting arrow-heads in



FIG. 472.—BRONZE OBJECT RESEMBLING TWO ARROW-HEADS

such a way. A brick mould for leaf-shaped arrow-heads was found in the First Semitic stratum.

*Javelin- or Dart-heads.*—But few words are needed for these, which differ by their superior size only from arrow-heads. Indeed many of the objects referred to in the preceding pages and figured on Pl. ccxv are more properly to be described as javelin-heads; but inasmuch as the type of both is uniform, it was thought more convenient to describe them together. Some of the largest of those described may be actually spear-heads.

*Spear-heads.*—These fall into two classes—socketed and tanged. The latter as a rule partake of the same general form as arrow- and javelin-heads, but are again larger. The blade, however, is always triangular in shape, and the tang as a rule is comparatively short. Some of these are possibly knives.

A sufficient number of representative specimens of the simple native type of bronze spear-heads is given on Pl. ccxvi. The first is a good example, though unusually short, with triangular blade and solid, non-tapering tang. It comes from IV 4. Figs 2 [III 18], 3 [V 3], 4 [V 3], 10 [VI 2], and 12 [IV 28] are more normal examples of the typical form. In these the blade is triangular, sometimes with a slight entasis, and the tang is flat and tapering (in 3, probably also in 12, the end of the tang is broken off). The longest tang in proportion to the length of the blade

is shewn in 10. Figs. 5 [IV 4], 7 [V 18] are a variety in which the side of the blade is concave. This form, if carried further, would develop barbs, as in Pl. ccxvii, fig. 1a. In fig. 6 [III 27] we see a central rib: this early specimen is also noteworthy for its sharp point. The rib is yet more prominent in fig. 8 [waste earth]. In fig. 9 it dies into a ridge, giving a flat lozenge-shape to the section of the spear-head. Fig. 11 [IV 28] is a peculiar long narrow spear-head—this variation of the proportions of the type is sometimes found about this period, but not very frequently.

A few less commonplace forms of spear-heads are shewn in Pl. ccxvii. Of these figs. 1 [V 13], and 3 [VI 28] are tanged like those in the first Plate, but they have a stop at the base of the blade. The first of these has small lumps on the side shewn in the drawing—a result of imperfect casting. The other side has a ridge. It is not common to find a ridge on one side of a spear-head. Figs. 2, 4, 5 are specimens of socketed spear-heads. The first of these [IV 28] had no rib in the blade. A fragment of the end of the staff (of olive-wood) remained embedded in the socket. Fig. 4, from the Fourth Semitic, in the same pit, has the socket slit open, as is often the case, to provide for varying width in the staff. Fig. 7, from V 12, is a smaller specimen: note the ogee head, which we have already seen to be characteristic of this period.

Figs. 6 and 8 are of iron, a material in which spear-heads are rare at Gezer. The first of these, with a remarkably massive tang, comes from V 17, the second from V 29. In the latter the handle was originally socketed, but is now quite filled with iron rust. Figs. 1a, 2a are also iron, from late Fourth Semitic or Hellenistic debris. The first is a barbed spear-head, which is quite unusual. The second (which has bronze rivets) is rather a knife than a spear-head.

*Chapes.*—The conical sockets of bronze or iron, specimens of which are represented in Pl. ccxviii, figs. 1–5, are probably chapes, *i.e.* the shoes at the butt end of spear-shafts. These are all of similar shape, differing only in height and diameter. The side of the socket is always slit. Fig. 1 is of bronze from IV 4: fig. 2, also bronze, from the Fourth Semitic Period. The other three are iron, fig. 3 being from VI 11, fig. 4 from waste earth, and fig. 5 from outside the brick gate of the inner city wall. This latter *may* be an ox-goad, as the end is flattened, and it is possible that the long narrow specimen fig. 4 may be meant to serve the same purpose. Fig. 5a, of bronze, from the Second Semitic stratum, is a more doubtful specimen. The side in this case is not slit, and the top is serrated with triangular teeth. It is more delicate than chapes or ferrules usually are.

*Swords and Daggers.*—Swords and daggers were used rather for thrusting than for cutting; the fine scimitar from tomb 30 being one of the few exceptions. The blades are therefore short and pointed: in one indeed (Pl. ccxviii, fig. 7) the edges are actually thickened.

The handle is either of a piece with the blade or, more commonly, made separate. Two examples of the former type are shewn in the Plate. One of these is fig. 6, on the same Plate, which has lost the greater part of its blade.

In this example the handle is flanged for hafting-plates of ivory, secured by rivets and, probably, a metal band round the lower end. It is from early Fourth Semitic débris. The other, fig. 9, is iron: it came from Hellenistic débris outside the S. Gate. It has a round handle expanding at the

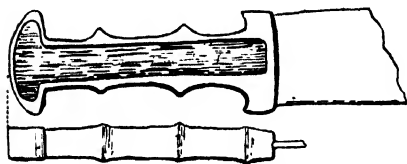


FIG 473.—BRONZE SWORD HANDLE

lower end to give a firm grasp. In another specimen (also from Third Semitic débris) the sides of the hilt still retained fragments of the ivory hafting-plates, though these soon disintegrated after exposure (fig. 473). Figs.

7, 8, 10 are swords in which the hilt was made in a separate piece from the blade. Probably all three were like fig. 7, with a flat projecting tang having rivet-holes for securing hafting-plates: but the tang is broken off from figs. 8 and 10. There is an unusual number of rivet-holes in the tang of fig. 7. This specimen was found in early Fourth Semitic débris on top of the inner city wall at the S. end of trench 29. Fig. 8 (Fourth Semitic); fig. 10, which is in iron, is from V 10.

Large numbers of ornamental dagger pommels in polished white stones came to light in all the strata. Representative specimens are shewn in fig. 474. It is curious how often these ornaments were found to have been burnt.

None were discovered in association with the dagger to which they belonged.

*Axes.*—It is highly probable that the axes already described on pp. 241–243 were used on occasion for military purposes, for which some of the heaviest would be well fitted. We need not do more here than refer to the description already given.

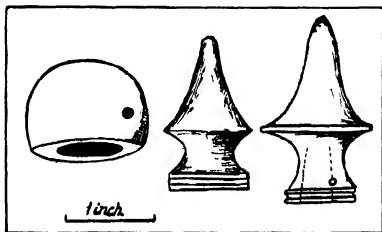


FIG 474.—DAGGER POMMELS

## CHAPTER X

### RELIGION, FOLKLORE, AND SUPERSTITION

#### § 43.—PLACES OF CULT

IN conducting such an excavation as that of Gezer it is a good rule to develop a bias *against* assigning a religious purpose to any object or



FIG. 475.—STANDING STONE AT II 2 A

building. A glance over the plans in this work will shew at once that if the forest of pillar-bases scattered through every level were all to be explained as *maššêbôth*, the ancient Gezerites might truly be described as *δευσιδαμονεστέροι*! Whatever we may or may not know about the ancient city, we can be sure that it was not a huge complex of sacred buildings, and that the worship of the local divinities, however important, was not the exclusive occupation of its inhabitants.

Take for example the large stone **II 2 A** already referred to in Vol. I, p. 237 (fig. 475). It is untooled, 7' 6" high and 4' 10" broad; two smaller stones wedged under it keep it in a vertical position. This is not adapted as a pillar for supporting some superstructure, and so cannot be treated as a mere part of a building. It is natural to conclude that this is a sacred stone of some sort, excavations round it having shewn that it is not a monument over a tomb. But it may well be a landmark or a memorial of some victory (like the  $\gamma$  erected by Saul after conquering the Amalekites) and have no religious purpose whatever.

Again, the peculiar rock-cutting associated with cave **4 I** (Pl. xvii) was by myself at first supposed to be some sort of small High Place. But for this there is really no evidence. I now feel very little doubt that there was nothing here but the dwelling, perhaps, of some notable; and that no one would have been more surprised than he to be told, when he smoothed away the rock in order to make his courtyard conveniently horizontal, that he would ever be supposed to have been constructing a place of cult!

There are only three places in the mound itself which it seems reasonable to explain as set apart for worship. On a neighbouring hill there is what very likely is the relic of an old High Place. We may now proceed to speak of these four shrines.

(1) *The Rock-cut "Place of Sacrifice"*

This very curious series of cuttings has already been described in Vol. I in connexion with the caves [**16 III**, **17 I II**] associated with it, and is illustrated in Pl. xxvii; and we need say nothing more about it here than to point out the features specially suggestive of a possible religious purpose. There is a general view of it in fig. 476.

Unquestionably the most remarkable detail in the whole system, from this point of view, is the orifice, with its associated channel, that opens into the roof of cave **17 IV**. The channel shews that the orifice is for the passage of fluids into the cave; the large southern doorway would effectually prevent water standing in the cave, so that it is not merely a catchment channel for collecting rain; and even if the cave were adapted to serve as a cistern, which it is not, this channel, owing to the configuration of the rock, could not possibly serve such a purpose. The theory that to me appears most reasonable is that which regards the orifice as the channel whereby blood and other fluid offerings were passed to the



divinities supposed to dwell in the cave; in fact the *ghabghab*, as it would be called by the heathen Arabs.

It was hoped that the clearing of the cave would have thrown some light on the purpose of this channel; and (assuming the truth of the suggestion just made) would have told us something about the chthonic deities thus worshipped, and the nature of the rites whereby they were honoured and propitiated. But unfortunately clear evidence was found that the cave had been used as a kind of cellar in the Second Semitic Period, and its contents were all to be assigned thereto. They



FIG. 470. GENERAL VIEW OF THE ROCK-CUT "PLACE OF SACRIFICE"

included weavers' weights with scarab impressions upon them; pottery of characteristic forms, some burnished and some painted in the style peculiar to the Early Semitic era; grindstones; a lamp of the Early Semitic pattern and a bronze pin. One fact, however, was suggestive. On the rock floor of the apse of the cave beneath the orifice and under the earth that contained these objects, were found a number of pig bones.\*

\* A *number*, observe, not "a vast quantity" as I have read somewhere. May I venture an appeal to writers for the press to use moderate adjectives about matters such as this? Thus, in a succession of press-cuttings that I received from time to time, the stature of the tall man found in one of the Philistine graves shewed an ever-increasing approximation to that of Goliath. It is hoped that this note will check his telescopic tendency.

The pig is an animal found very rarely represented among the animal remains in the débris. That the pig owes the aversion with which the Hebrews and probably other Semitic tribes regarded it to a previous sacrosanct character has been maintained by Robertson Smith in his *Religion of the Semites*, and is now pretty generally accepted. Here we seem to find evidence of its being actually an animal for sacrifice. The bones were concentrated in the place indicated, unlike a number of cow, sheep, and bird bones that were found scattered through the earth associated with the Semitic objects catalogued above. That these pig bones were not cleared out in the Semitic occupation of the cave is due to the lucky accident that the Semites did not trouble to remove the earth covering them.

Surrounding the orifice are two or three circular depressions in the rock, built round with stones set on edge, but so arranged that they may drain into the opening. These might be subsidiary places for sacrifice.

The meaning of the cup-marks is a question on which we need not here enlarge, as we have already considered those puzzling symbols (if they be symbols) in Chapter III. It should be said, however, that the presence of a great group of cup-marks in itself does not necessarily constitute a High Place; as the map of the rock-surface sufficiently shews, there are plenty of collections of cups on the hill which probably no one would venture to suppose had a religious purpose. It is the *ensemble* of cups with caves of very peculiar and evidently special type, and the drains associated, that give this supposed Place of Sacrifice its special character.

That in a certain very limited number of cases the cup-mark may have had a religious purpose\* is not impossible; and certain considerations suggest that it may have been a religious expression of the Troglodytes as opposed to the Semites. Especially interesting and suggestive in this connexion is the collocation of cup-marks with a standing stone at the mouth of the Troglodyte crematorium, which was afterwards used as a burial-place by the earliest Semites. Here we might expect to find traces of funeral sacrifices or other religious rites left by both races. And this seems to be actually the case. There is a group of cup-marks, which we may associate with the Troglodytes. *After about a foot of earth had accumulated*, covering the cup-marks, a small standing stone was erected. The standing stone is the most characteristic religious expression of the Semites, and therefore this particular example should be ascribed, as I understand the indications, to the Semitic race who afterwards utilized the cave. This accords with the fact that the peculiar rock-cuttings now being discussed were covered with Semitic débris of the earliest period and therefore preceded it in time.

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\* I am speaking only for Palestine. Cup-marks elsewhere must be separately considered with reference to the special ethnological history of each country.

Nothing was found in the large cave **16 III** (of which **17 III** probably was originally a part) to give a hint as to its place in the scheme, though no doubt it served some important function. Like cave **17 IV**, it had been used in later times, and cleared of its contents yet more effectually. Two stages in its subsequent appropriation can be traced. In the first a rude wall was built round the stairway leading down to it: at this time the roof seems to have collapsed and a wall built to strengthen the remainder (the accident being utilized by forming the tank in the floor just under where the roof fell, in order to collect rain-water): in the second stage the floor as well as the original steps had become silted up, and a new stairway was formed in the wall supporting the roof. Whatever its original purpose, it can hardly have been a mere cave for dwelling like the majority of the caves on the hill: it is far too large and too carefully cut to be compared with these

## (2) *The High Place*

Probably the unearthing of the great central sanctuary of Gezer was the most important of the results of the excavation. The history of the discovery has already been sketched in Chapter II; we now proceed to a detailed description. This is divided into four parts: the cave; the alignment of pillar stones; the subsidiary buildings; and the antiquities discovered within the precincts.

*The Cave.*—The cave is no doubt the earliest member of the High Place, and possibly its existence determined the site chosen for the sanctuary. It is therefore natural to begin an account of the sanctuary with this member. It is not, however, necessary to repeat the description that has already been given of the excavation in Chapter III (caves **18 I**, **19 III**, Vol. I, pp. 105-107).

It was disappointing that no relics directly associated with worship were found in the cave. The much-decayed skeleton of a man was found in one corner, and on a stone in the middle of the cave, above the silt that filled it and covered the Troglodytes' deposits, was the skeleton of a new-born infant. But the other contents of both chambers were just such as were found in any other of the Troglodytes' dwellings on the surface of the hill.

We therefore begin the history of the High Place before the time

when there was any consecrated enclosure here at all. Before the Semites came with their hill, tree, and well worship, the site was occupied by two independent dwelling-places, inhabited by the non-Semitic aborigines. It is probable that these dwellings were adaptations of natural caves enlarged by hammering away from the rock fragments and masses by means of blocks of stone.

It has been mentioned as a possibility that the presence of these two caves was the attraction that led to the establishment of the Semitic High Place on this particular part of the mound. For the choice of the site of the sanctuary demands some consideration at the outset of our inquiry. It is not the highest part of the hill, but rather in a hollow between two rising knolls, just where we might expect a High Place *not* to be. Nor is it distinguished from other parts of the mound by the presence of springs or of remarkable rocks, and it is unlikely that it bore any remarkable trees. It is not even on the middle of the hill-top. Why, then, was this spot selected?

In our imperfect knowledge of early Semitic religious thought, this question cannot be fully answered; but some not unreasonable conjectures may be hazarded. We may perhaps be not far wrong if we suggest that other eligible places on the mound were excluded from choice as places for religious observance on the principle of *tabu*. For example, the great ramifying cave II 29 would in itself be well suited for mystic ceremonies; but it had been adapted as a cemetery, and being thus associated with the disposal of the bodies of the dead would be unclean, and its neighbourhood unfit for the erection of the dwelling-place of the local *numen*. A similar prohibition would extend to any site on the Eastern Hill, for there an important cemetery—the Troglodyte crematorium—was to be found. The Troglodyte place of sacrifice with its complex of caves might possibly be avoided because it was already sacred to the uncomprehended spirits which the aborigines had feared. Perhaps similar disqualifications applied to every other place on the hill-top where caves were to be found, and that the site actually chosen was selected by a process of exclusion.

The infant skeleton deposited on a stone in the middle of the first chamber can hardly be disconnected from the similar deposits of infants' bones from the other part of the High Place, and shews that it is by no accidental circumstance that the caves are included within the area of the sacred enclosure.

This stone was a rude block of limestone, about 1' 6" each way. It had the appearance that a rude altar stone might be supposed to have, not profaned by masons' dressing (cf. Exodus xx 25) if left with the last offered sacrifice unremoved.

The passage connecting the chambers was formed, as the chisel marks shewed, by cutting a vertical shaft in the rock between the two chambers at the nearest point of approach between them, so far as this could be

calculated, and then by breaking through the rock wall of this passage so as to open into each of the chambers. The opening at the mouth of the shaft was then covered with stones. It is just possible by lying flat to work one's way through: being crooked, it is impossible to see from end to end, but, as I have proved by repeated experiments, it is possible to hear through it from any part of the one chamber a sound made in any part of the other.

Now, if these caves were merely dwellings it is difficult to see a reason for making this passage so narrow and awkward. Had internal communication been the only purpose of the passage, a little more trouble would surely have been taken to make a more practicable means of transit. I will perhaps be reminded of the narrow awkward passages that are often found in the caves at Beit Jibrin: but these inconvenient burrows generally owe their narrowness not so much to the intention of their excavators as to the accumulation of earth that has subsequently silted into them. In the cave before us it is not altogether obvious why an internal communication should be required at all, at least so long as the two external doors remained open; as they were situated but a few paces from one another, and a man might easily go from Chamber I to Chamber II *and back*, in the time that another would be painfully creeping through the passage. If it were meant to secure a communication between the chambers when one or both of the external doorways was blockaded by enemies, the owners of the caves would hardly have put so much difficulty in their own way by making the communication passage so troublesome to use. And we can scarcely suppose the enemies in question to be so blind as not to see people issuing from Chamber II whom they thought they were keeping at bay in Chamber I!

We must not forget that when first discovered Chamber II was found to have been intentionally closed up. A pile of stones was erected on the outside, against the hole broken in the north wall; and inside the cave a structure of large stones had been carefully erected against the entrance, effectually blocking it. By these means Chamber II had become transformed into a secret room, incapable of being lighted from outside, or of being entered except through the passage.

The cave floor was covered with earth in the time of the High Place, to a depth of about two feet, concealing the remains found on the rock surface. That this earth had already accumulated when the High Place was built was indicated by the fact

that the stone with the infant skeleton was lying upon the surface of the earth. Perhaps five or six inches of silt had filtered in since the High Place period, but not more. It is evident from this that the roof of the cave was too low in the time of the High Place to allow of a person standing upright. No doubt the High Place authorities found means to prevent rain-water from washing in while the cave remained open, and of course after it was closed its mouth soon became built over, and the accumulating strata covering its mouth prevented any further considerable inflow. Hence the cave was not completely filled with silt when it was opened in the excavation

In certain Greek temples there was a place called the *ἄδyton*, which was used for oracles (Herodotus v 72), and for the somewhat analogous purpose of magical healing—

ἦ τοι τὸν Διτῶ τη καὶ Ἄρτεμις ἰοχάουρα  
ἐν μεγάλῳ ἄδυτῳ ἀκρόντο τε κύδαινόν τε \*

and that this was the innermost and most sacred recess of the temple is shewn by the etymological signification of the name, which is "not to be entered." In other temples the same function was served by the *μέγαρον*. Thus the messengers of Croesus "entered the *μέγαρον* consulting the god," who gave an answer in the usual hexameters (Herodotus i 47). A similar passage, also relating to Delphi, will be found in Herodotus i 65; and in ii 141 a dream oracle in the *μέγαρον* of an Egyptian temple is spoken of. Robertson Smith (*Rel. Sem.*) makes the ingenious suggestion that the word *μέγαρον* in the sense of "place of oracle," *i.e.* when indistinguishable in use from the *ἄδyton*, is to be dissociated from the true Greek word *μέγαρον* meaning a "hall," and connected etymologically with the Semitic *מַעְרָה*, *מערה*, "a cave," regarding this word as being borrowed from the Semites with the detail which it indicates. One evidence of the connection between oracle-giving and the *adyta* of Semitic temples is given us by the description of the temple at Jerusalem, the "Holy of Holies," in which in 1 Kings vi 19 is called the "oracle" (*דְּבִיר*).

It cannot escape notice that these caves, connected by a narrow passage, are admirably fitted for just such a purpose as the giving of oracles. We are not justified in asserting categorically that they were actually so used; but it is easy to picture a suppliant conducted into the chamber, to hear the voice of a deity personated by a confederate of the High Place officials—(I waive the question of the exact nature of the priesthood of

\* Homer, *Iliad* v 447-8.

this and other High Places, as one on which excavation has as yet no light to throw). The confederate has previously been sent into the secret chamber; the passage to which being crooked it was impossible for the owner of the voice to be seen. Such a voice issuing from the mouth of the mysterious passage would have a weird effect for a superstitious inquirer, already perhaps made half hysterical by preliminary rites or ordeals, before being admitted to the cave. It is true that the deception is of a very obvious nature; not more so, however, than the "Holy Fire" exhibition in the Church of the Holy Sepulchre. Some such jugglery, ventriloquial or otherwise, must have taken place when Saul visited the pythoness at En-Dor.

*The Alignment.*—The alignment of monoliths is the most important and certainly the most striking member of the High Place. It consists of a row of undressed pillar stones, originally ten in number, all but one being of the local limestone. For convenience of reference they will here be numbered in order from south to north. The eighth and tenth stones have at some time been destroyed, only the stumps remaining. When the alignment was uncovered it was found that the seventh stone had fallen forward so that it stood at an angle of about forty-five degrees, and that the ninth had fallen flat. They have been re-erected as nearly as possible on the original sites; but in the case of the seventh the foot had slipped about 1' 6" aside, and with the simple means at my disposal it was impossible to move the stone so as to get it exactly on to its original site. I had to be content with swinging it back on its base, so that it is now slightly out of the almost regular curve in which the stones stand. The ninth stone had been placed standing in a kind of socket, scooped out of a boulder, and its foot was easily slipped into the cavity prepared for it. At the end of the work the stones were carefully covered up again as they were before, so that unless the fellahin take the trouble to dig them up again (which is unlikely) they will be preserved *in situ* till the remote time when a national pride in monuments of antiquity such as this shall have been developed locally. At the present rate of evolution they will probably by then be as old again as they are now.

The pillar stones stand in a line, not straight, but gently curved. The chord of the curve lies due north and south (magnetic); its concavity faces east. It is probable that the curve, which is hardly perceptible until the positions of the stones are plotted on paper, is not intentional, and that they are intended to be in a straight

line. It is instructive to contrast this alignment with that discovered in the mound of Tell es-Şâfi by the Palestine Exploration Fund in 1899. Here there were three stones, whose respective dimensions agree closely with those of stones V, VI, VII at Gezer. These stones stood almost exactly *east and west*: a fact that seems to indicate that the direction of the alignment was of no importance, or else that it constituted an element of difference between the religious rites of different districts.

It is important to repeat and emphasize the fact that the stones are rough and undressed. In this respect they are in marked contrast with the squared pillars, such as are in the building described in Vol. I, p. 172. These are obviously intended merely for *building* stones, supporting a roof or some other superstructure, and have no essential religious function. In fact it is improbable that stones with a religious purpose would be dressed to formal shapes. The prohibition of iron-dressing in the altar-stones (Exodus xx 25) is, no doubt, a relic of an ancient *tabu*, of which we see another glimpse much later in the exclusion of *iron* tools from the works at the building of Solomon's temple (1 Kings vi 7).

We now proceed to an examination of the individual stones of the alignment, and to a consideration of the various questions they suggest. In the first place we may give at once a table whereby their dimensions and relative positions can best be shewn. The column headed "interspace" gives the distance reckoned from the stone next preceding; and the height of foot is reckoned from a plane passing horizontally through the base of the second stone of the series, which is set the deepest in the ground.

Stone.	Interspace.	Height of Foot	Height	Breadth	Thickness
I	—	1' 5"	10' 2"	4' 7"	2' 6"
II	7' 1"	0'	5' 5"	1' 2"	1' 9"
III	11' 7"	1' 9"	9' 7"	5' 0"	2' 0"
IV	3' 2"	0' 9"	10' 9"	3' 7"	2' 3"
V	3' 7"	1' 8"	5' 10"	1' 7"	2' 1"
VI	4' 1"	0' 9"	7' 0"	2' 8"	1' 6"
VII	4' 7"	0' 7"	7' 3"	2' 10"	1' 3"
VIII	13' 6"	—	—	—	—
IX	2' 11"	0' 9"	7' 0"	1' 7"	1' 4"
X	4' 5"	—	—	—	—

The effect of the alignment will be realized by a glance at the frontispiece of this volume. In the accompanying elevation (fig. 477), representing it in diagram.



form, it will be seen that there is another stone, now prostrate, underneath the foot of the first pillar. This stone is shewn in fig. 478. Were it set on end with its base in its present position, its top would be about flush with the top of the small stone which stands second in the series. This has suggested to me that the High

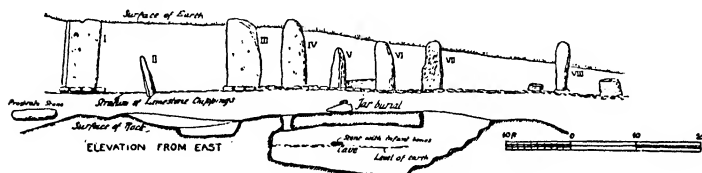


FIG. 477.—ELEVATION OF THE ALIGNMENT

Place was originally marked by two small stones, and that the level of the ground fell slightly towards the south, following a fall in the rock-surface which is indicated in the elevation fig. 477, ending in the hollow I 19 A. This accounts for the foot of the southern stone being set at a deeper level than that of the small second stone

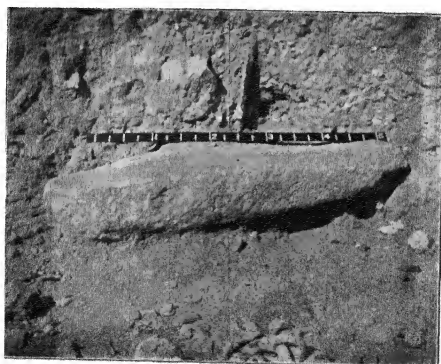


FIG. 478.—PROSTRATE STONE UNDER S. END OF ALIGNMENT

which, on this hypothesis, would be its original companion. Twin pillars are quoted by Robertson Smith (*Rel. Sem.*) from Tyre, Paphos, Hierapolis, and Jerusalem. This is possibly the original normal number, meant to suggest a divinity and his female companion; and it may be that the great High Place of Gezer had its small beginnings in this comparatively insignificant pair of stones.

In this connexion it is important to observe that the second pillar displays a feature unshared by any of the others except one small and inconspicuous spot on the fifth of the series. The top of the pillar has several smooth spots \* upon it, and those who have seen the effect of the frequent and repeated kisses of devotees upon stones which for sacred associations are a resort of pilgrims will not fail to recognize that these polished marks are probably due to the same cause. In religion the most ancient rite or instrument is, as a rule, the most sacred; hence, when we find in a place of worship one member distinguished from the rest by special regard, it is reasonable to assume that it is also the oldest. If the second stone be really the

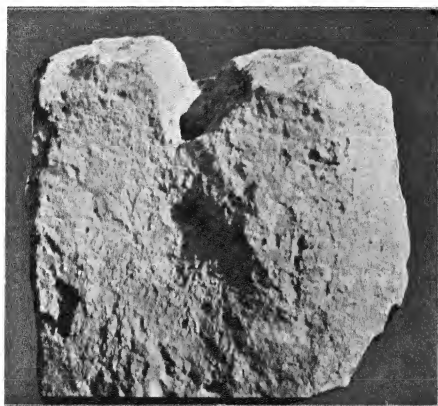


FIG. 479.—TOP OF STONE NO. I

survivor from the primitive pair, it is not difficult to understand the excess of devotion that has left such marks upon it.

It can be only a matter for conjecture why the prostrate stone was allowed to fall, and when fallen, why it was permitted to remain prostrate till it was buried and forgotten. It is not impossible that it was actually buried with intention, to prevent its capture in some raid upon the town: this suggestion will become more intelligible after we have discussed the questions which centre in the seventh stone. Whatever may have been the reason, all we can say definitely is, that after earth had covered the prostrate stone a colossal monolith was erected partly over it. This stone is hewn to a roughly rectangular section, the broader face being east and west. The

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\* Again I must emphasize the moderation of this description. This stone shews a tendency to get into literature highly polished all over!

western face has marks of blackening by fire near the base. It is remarkable that the aspect of all the stones as viewed from the west is very different from their appearance to the east; the surface is distinctly smoother in all of them on the western side, sufficiently so to attract notice at once when the two aspects are compared.

In the top of this stone there is a groove (as though to receive a rope or chain), at the western end of which are two pockets on each side, as it were for a block or bar to which to secure the rope. See the photograph, fig. 479. There is nothing like this on any of the other large monoliths. It may be a realistic touch in connexion with the possible symbolism of the stones, or merely a catch for the rope by which the monolith was hauled into position. Another explanation, which I give for what it may be worth, was suggested to me by a statement in the *De Dea Syria* of Lucian (28-29). In front of the entrance of the Hierapolis temple were two great stones. Once a year a priest ascended to the top of one of these pillars, and remained sitting there seven days, during which time he acted as mediator between suppliants and gods. This priest ascended the pillar in the manner so well known to palm-climbing savages—by working upwards a loop of rope encircling his own body and the stone. Reaching the top, he dropped a second rope down, by which he kept himself provided with whatever he required. The stylite never slept during his week of office—it was alleged that a scorpion would crawl up the pillar and wake him if he did so. Lucian adds to this statement the characteristic sarcasm: "This scorpion story is of a character suitable to its divine associations; of its exactness I can say nothing—fear of falling off would, I think, contribute considerably to wakefulness." From this comment of Lucian's

we learn that the perch of the Hierapolis stylite was no more secure than would be a seat on the top of the column now under discussion; and it may be that an



FIG. 480.—STONES I, II

oracular or meditative stylite sat at certain seasons upon it, and by the aid of a rope secured in the groove hauled up whatever he might require during his stay at the top. There is a cup-mark in the middle of the western face of this stone just about a foot beneath the groove. In fig. 480 are shewn the first and second stones, as viewed from the north.

The third stone is massive, flat in section, and set with the broad faces, as before, east and west—but not quite parallel with the axis of the line of stones. Except a cup-like mark on the western face, some 6" in diameter, about 2' below the top, and 3" from the northern edge—for which see fig. 481—this monolith has no particular individual feature. It is kept in position by a number of stones wedged round the foot.



FIG. 481.—W. FACE OF STONE III, SHOWING CUP-MARK

The fourth stone is the last of the three great monoliths whose tops projected above the surface of the ground before the excavation began. This stone is rather oval in horizontal section, though flattened on the western side. It tapers to a point at the top.

The fifth and sixth stones are insignificant, and present no special details, save that the fifth has a small cup-hollow low down on its western face, and the sixth appears at some time to have had its top broken off by violence.

The seventh, however, is of special interest. Even to one not expert in petrology it presents peculiarities not shared by any of the other stones. A glance at the photograph, fig. 482, will shew that it is honeycombed with fissures and weather-marks in a way quite peculiar to itself. These appear on the eastern face only;

the western face is coincident with a cleavage plane of the original rock, and consequently has a hard surface that has resisted the weathering influences.\*

Though this peculiarity of the stone was noticed from the first, and commented upon by more than one visitor to the excavation, its full significance was not realized till the stone was examined, with the rest of the series, by the well-known expert in Palestinian geology, Dr. Max Blanckenhorn. His experienced eye detected in the texture of the stone certain minute crystalline formations not to be found in any of the other monoliths, and at once marking the pillar as hewn from another than the local rock, in which such crystals are not to be found. The other stones had been quarried at or near Gezer; this one, however, must have been brought from a

distance. Dr. Blanckenhorn suggested Jerusalem as a possible place of origin, though not to the exclusion of other places where the same formation appears. The two arrows marked in the photograph fig. 483 are pointing at the spot which arrested Dr. Blanckenhorn's attention.

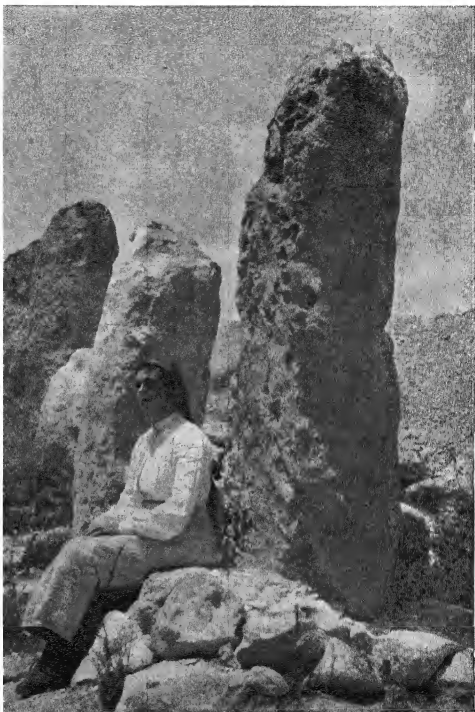


FIG. 482.—EASTERN FACE OF STONE VII

\* It is perhaps advisable to explain that the pile of stones round the base of the pillar were placed under my direction to prevent the stone from falling; it was found, as already noticed, leaning considerably out of the perpendicular, and when replaced required a support to keep it in position.

This very interesting observation suggests an explanation of a peculiar curved shallow line that had been noticed, cut on the smooth face of the stone, and to be seen in the photograph, fig 483; namely, that it was cut to prevent the dragging rope from slipping off the stone.\* If it be asked why did the Gezerites take the trouble to drag from a distance a stone when one as good might be found on the spot, the most probable answer will be that the stone in question was one of the sacred stones of the High Place of another city, and that it was captured in a raid and brought to Gezer partly as a trophy, partly in the hope of transferring the protection of the *numen* of the one city to the other. The Israelites carried the ark, the tangible symbol of their Deity, into the battle with the Philistines; the latter captured it and, for precisely similar motives as we have suggested, carried it to the temple of their own god. (1 Sam iv 3 *sqq.*)

If the stone came from Jerusalem, as Dr. Blanckenhorn admitted to be possible, the evidence abundantly offered by the Tell el-Amarna tablets of hostility between the Gezerites and the Jebusites would derive additional interest. But the provenance of the stone can scarcely be so definitely asserted.

We are perhaps on firmer ground when we call to mind the boast of Mesha of Moab, contained in the eleventh and twelfth lines of his world-famous stele, that he "fought against the town (Ataroth of Gad) and took it and put to death all the (people) of the town, a spectacle for Chemôsh and for Moab, and removed from it the *Ariel* of Dodah and dragged it before Chemôsh in Keriôth."

Again, in line 17: "And I took thence (from Nebo) the *Ariels* of Yahweh and dragged them before Chemosh."

It is obvious that some heavy object of temple furniture was so transferred by the victorious Moabite, and from the use of the plural it was evidently something capable of duplication. It seems likely that the object dragged would be something that could make a show;† it is also likely that Mesha would try to capture the residence and expression of the god, which to him would be almost the same as capturing the god himself.

The verb which Mesha uses to express the sense of dragging is also used by Jeremiah in describing dogs feeding on corpses and dragging them about (xv 3) and in the curious passage 2 Sam. xvii 13, in which Hushai counsels Absalom, among other things, to drag into the river with ropes any city that harboured David. Kings, both before and after Knut, have been ready to listen to the flattery of their courtiers; but it is difficult to understand how in the stress of revolt the most infatuated of egotists could have preferred the obviously absurd counsel of Hushai to the sane advice of Ahitophel. Is it possible that Hushai meant, and that Absalom understood him to mean, by "the city," the stones in which resided the *numen* who guarded

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\* This explanation has been questioned, but no better has as yet been suggested. Had the concavity been upwards instead of downwards, analogies might have been sought with the triangular figures cut on rocks in Phoenicia, but I do not think that the analogy holds as the line is drawn.

† The word is commonly translated "altar-hearths." I confess myself not clear as to what "altar-hearths" are supposed precisely to be.

the interests of the city? We could understand how the hot-headed rebel would relish the idea of tearing thus away the whole of the future fortune of a community unfavourable to his interests.

An inspection of the table of dimensions at the beginning of this description will shew that there is a wider gap between the seventh and eighth stones than

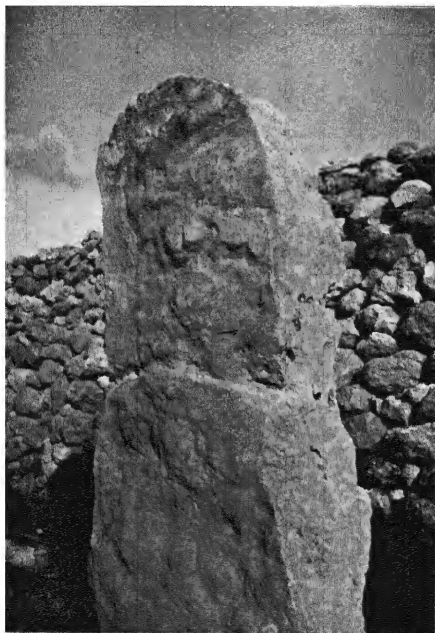


FIG. 483.—WESTERN FACE OF STONE VII

between any other pair of adjacent monoliths in the series.\* We can hardly doubt that this is intentional. The number seven was complete in itself; its sanctity among all Semitic races is a matter of common knowledge, and needs no illustration: we

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\* It has often been suggested that there was here another stone, now completely disappeared. This is incorrect. The platform or pavement on which the stones stand has no break or gap at the place where such a stone would stand.

need not be surprised at the seven stones being grouped by themselves. When for some reason other stones were added, a wider gap was left in order not to disturb the perfect number.

In a lesser degree three and ten have an esoteric importance; and it can hardly be an accident that the additional stones were three in number, bringing the total up to ten. There were three stones in the High Place at Tell es-Sâfi. Another stone would make the total eleven, which does not appear such a likely number.

From the elevation (fig. 477) it will be seen that the depth of earth covering the alignment is very considerably reduced at its northern end. In fact the last stones at this end were barely covered at all. It is not, therefore, a matter for surprise that two of the northernmost stones were broken short at the base. This piece of iconoclasm *may* have been due to the purifying zeal of Simon Maccabaeus, when he captured the city and purged it of all idolatry; but it is not necessary to assume this. Simon *may* have left them and they may have been broken up by house-builders; in any case they are gone. The ninth stone, which is intact, would no doubt have shared the same fate, had it not fallen and been covered with earth. So would the interesting seventh stone, had it not fallen likewise and so been concealed by the accumulated débris.

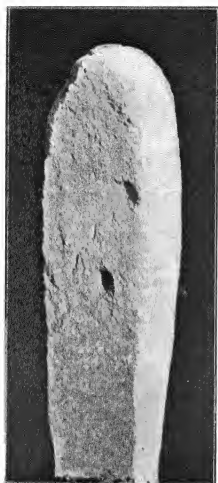


FIG. 484.—STONE IX

The ninth stone is also of considerable interest. It is of the same shape as the fourth except that its west face is even flatter, with yet more definite angles. On its western face are cut two cup-marks with meandering channels depending from them. These are shewn in the photograph fig. 484.

Before we pass from the alignment an important member of it claims our attention. This is a large rectangular block of stone, measuring 6' 1" by 5' by 2' 6", having in its upper surface a rectangular depression 2' 10" by 1' 11" by 1' 4" deep. This block stands west of the alignment, occupying the space between the fifth and sixth pillars; its position can be seen in the diagram fig. 477, and a representation of the stone itself is given in fig. 485.

Three suggestions have been made regarding the purpose of this stone. Until additional evidence is forthcoming from some as yet untried source, I hardly think it possible to make a definite choice between them.

(1) The most obvious suggestion is that it may be an altar. It cannot escape



notice that otherwise there does not appear to have been a formal altar in connexion with the High Place.\*

The hollow in the tabernacle and temple altars may be remembered and quoted in connexion with the hollow in this stone. A meandering channel cut on the upper surface of this stone, to the west of the depression, might possibly be in some way connected with its use for this purpose. But on the other hand, there is no trace whatever on any part of this stone of the action of fire, such as we should expect to find in an altar used either for incense or for sacrifice. Neither is there any smoke-blackening on the adjacent pillars, such as would certainly be seen if



FIG. 485.—SOCKETED STONE (IN THE BACKGROUND ARE VII, VI, V, AND THE SHADOW OF IV)

constant fires were here kindled. This objection might be met by remarking that the altar need not necessarily be meant for burnt offerings. But there is a second objection which is not so easily answered. It is that the stone is certainly dressed with metal tools. Here we are brought up once more against the old *tabu*, to which allusion has already been made.

(2) The second suggestion is that the stone is a socket for something; and for some time I held the view that it was for the support into which the *asherah* was fitted. Even yet I would not say that this conjecture is impossible; however, we require to know something more, not only of the origin and function, but even of

\* Of course it is not absolutely certain that a formal altar would be necessary at all—or, at any rate, an altar more permanent than a heap of earth.

the outward appearance of the *asherah*, before we can speak positively for or against it. On good but not absolutely conclusive evidence it is assumed that the *asherah* was a wooden post, like a maypole; but the socket in the stone seems too large for any pole of likely size, and unnecessarily large even for the addition of wedges to support it firmly.

There is a square block of stone which before the excavation lay *on the surface of the ground* to the west of the tops of the third and fourth columns. The sides of this stone are carefully worked smooth, but the broken appearance of the ends shews that the original top and bottom have been knocked off. It was often suggested by visitors to the works that this stone originally stood in the socket under discussion—just as the ninth stone stands in a small circular vat. The stone measures, at present, 6' in length; the cross-dimensions are 2' 5½" by 1' 5", tapering to 2' 5" by 1' 3¾". There is no reason to suppose that the taper on the rest of the stone would not be uniform, if so, it would have to be, when complete, about 19' long in order to fill the depression in the socket-stone properly. It was allowed to fall down as the excavation proceeded, and now lies on the rock-surface beside the socket stone, buried under eight or ten feet of earth.

(3) The third theory is that it may be a laver for ceremonial ablution. This purpose it would well serve, though it is too small to be used by a large body of worshippers. On the broad brim a man could sit comfortably to wash his feet, while the brim is not too broad to lean over to wash the hands. The lavers found by Professor Petrie at Serabit el-Khadem are somewhat similar, though they have not such broad rims.

*The High Place Area and Subsidiary Buildings.*—The extent of the area cannot be very well defined, as there was no boundary wall. The whole area was thickly covered by small houses, but their contents shewed that they were of later date, erected when the High Place had in a large measure lost its sanctity. We can form some idea of the size of the area by considering where the later houses are found in the same stratum with those of earlier date; for originally the High Place was an open space in the middle of the town, on which the later houses were built. Approximately the area thus arrived at was about 150' north to south by 120' east to west. On the north it was limited by the great inner city wall. A plan of the area will be found in fig. 486.

Down the middle of the area ran the row of standing stones. There is a strip of pavement of smooth round stones, about 8' wide at the northern end, but much narrower at the southern, on which stand the bases of these stones. A large part of the floor area of the High Place is covered with a stratum of limestone chippings, at a level of about 1' 6" above the surface of the rock.

The house walls scattered over the area I thought at first might be essential parts of the sanctuaries, vestries, lodgings for priests or *kedishôth*, treasuries, or the like; but not only was there nothing corroborative of this among the objects found in these buildings, but when they were drawn out in plan it seemed impossible to associate them in any scheme of design with the alignment

None of these fragments of house walls call for any special remark; we may, however, in passing, refer to the wall IV 3a, at the angle of which was found almost the only example on the whole mound of one column-drum resting on another. The drums were circular in plan

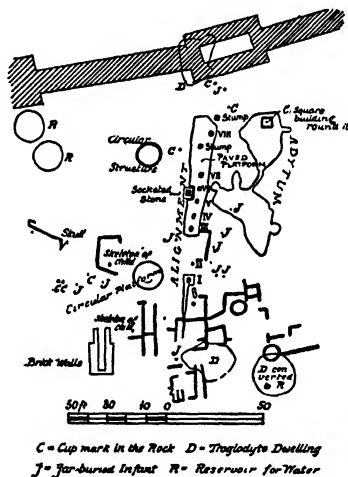


FIG. 486.—PLAN OF THE HIGH PLACE AREA

There are, however, certain individual structures which owing to their peculiarity may with greater likelihood be counted as actual parts of the High Place, though it is not easy to see what purpose they served. Among the most remarkable of these subsidiary buildings are two circular walls found west of the alignment, the one at the north end of it, the other at the south. The northern is the more perfect, and we therefore describe it fully; it is shewn in fig. 487. They are conspicuous in trench III 20.

The underlying rock surface is here rather irregular, and is in no way

cut or worked. It was covered by about 1' to 1' 9" of earth, over which was a smooth well-laid pavement of small stones. This pavement was circular in shape, and surrounded by a wall, which was found standing to a maximum height of 6'. It was of the usual rough construction, such as is found over the whole mound—rude field stones set in mud, and showing no attempt at scientific coursing. The level of the pavement, it should be said, was exactly at the level of the platform on which the alignment stands. The surrounding wall batters outwards from bottom to top; its section reduces in thickness from about 1' 6" to 2' at the bottom, to about 1' at



FIG. 487.—CIRCULAR STRUCTURE IN THE HIGH PLACE, STONES IX, VII IN THE BACKGROUND

the top. The diameter at the bottom is 13' 8", at the top 16' 6". The wall was continuous, no doorway being left in its course.

The circular structure at the south end of the alignment we can hardly doubt was similar, but it was ruined completely, and only the pavement was left. The diameter of this pavement was 18' 2", which, allowing for a wall thickness of about 2', would represent an enclosure a little larger than the first.

On the pavement inside the northern enclosure was found a large collection of fragments of the grey cyma-shaped bowls with wishbone handle, of Cypriote origin, so common over the whole mound at about 800–1400 B.C.

In the middle of this pile of potsherds was a small bronze model of a serpent (fig. 488). This discovery suggested the possibility that the enclosure might have been, a pit for keeping live serpents, preserved for charming and for tricks, analogous to those of Darwishes in Modern Palestine. Parallel practices, very likely of Semitic origin, can be quoted from certain Greek shrines, notably the temple of Aesculapius at Epidaurus. But on the other hand, snakes could have escaped from this enclosure, by climbing over its rough walls, or by burrowing through its flimsy masonry.

The serpent figure is  $3\frac{5}{8}$ " long, and evidently represents a cobra. The wild words that have been written about serpent worship have brought "ophiolatry" into even greater disrepute than the Druids; but with the classic instance of the worship of the bronze figure of a serpent in the

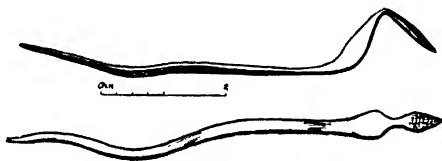


FIG. 488.—BRONZE MODEL OF A SERPENT

Temple of Jerusalem (2 Kings xviii 4), we cannot question that some such cult existed in Palestine. This bronze serpent from Gezer may well be a votive model of some such image.

To the west of the southern circular enclosure was a peculiar structure of sun-dried bricks, four or five courses of which remained. It consisted of two parallel walls, the one longer than the other, united by a similar transverse wall at the south end. These walls are marked **II 20 B**, and are shewn in fig. 489. Notice the set-off above the second course from the bottom. Nothing like this structure was found elsewhere in the mound. That it was in some way connected with the High Place is very possible.

On the east side of the alignment no buildings were found that could with any probability be regarded as part of the High Place, but east of the cave there was what seemed to be the depository in which the refuse from the sacrifices was cast. It is an ordinary rock-cut bell-

shaped cistern, about 16' deep. The mouth is rather wider in proportion than was usual in cisterns. In the middle of the floor is the usual filtering depression; in this case 4' 8" in diameter, 2' deep.

In the rock surface round this pit was cut an elaborate system of cup-markings, a plan of which is shewn in fig. 490. These cups are cut on a natural table of rock of irregular outline and surface, rising 4"-1' 3" above the rock surrounding. They are of various sizes, from tiny saucers

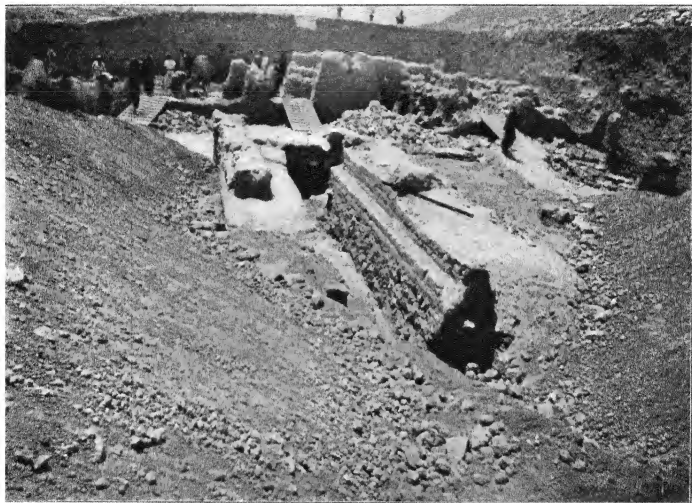


FIG. 489.—BRICK WALLS IN THE HIGH PLACE AREA

3" across to two large depressions each about 6" in diameter. The cup south-west of the cistern mouth is 2' 11½" deep; otherwise the depth of these cups is not very great. East of the cistern mouth is an irregular natural hollow; the oblong depression to the north-east is also natural. Two of the cups are oval in shape, but the majority are round.

Alluvium covered the floor of this pit to a depth of about 2'. Above this was a stratum of bones and large stones intermingled; this stratum was 1' 11" deep.

Above this again was another layer of alluvial silt, 3' 4" deep, capped by the usual cone of loose dry earth washed in by percolating water.

The bones were (1) human bones of both sexes and all ages—fourteen men, two women, a child of about twelve years of age, and an infant; (2) cow, sheep, deer, and goat bones. They were mixed together in a way which shewed that they had not been separated from one another by violence; but that the bodies had been allowed to float about in the water till the progress of decomposition caused the bones to drop asunder by themselves. The great number of bones found in this particular cistern shewed that we had not here to deal with accidental cases of

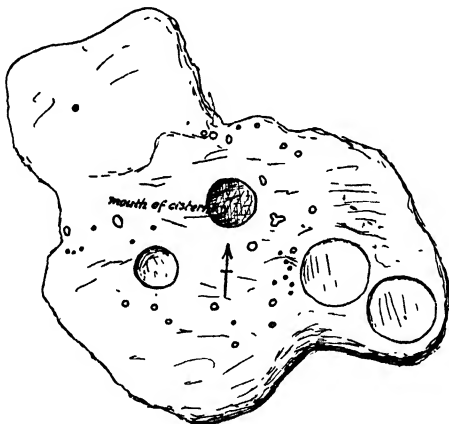


FIG. 490.—CUP-MARKS ROUND CISTERN IN HIGH PLACE AREA

drowning, which, as a rule, is the most likely explanation of the occasional discovery of single skeletons in cisterns. But it is exactly what we should expect to find if the cistern had been a receptacle for the bodies of unburnt sacrifices. The ashes of *burnt* sacrifices might have been disposed of otherwise, but if the body were not incinerated some method of getting rid of the remains was imperative.

The animals legitimate for sacrifice alone are found (the deer bones are interesting in this connexion): they are cast into the water alive or dead, and stones are thrown down to cover them. But as they fall into deep water they float for a while; the stones splash past them without harming them, but raising wavelets on the surface of the water that wash asunder whatever half-decayed bodies may already be in the cistern. Finally the separated bones sink to the bottom one by one. This is my reading of the discovery.

One is tempted to hazard the guess that this wide-mouthed cistern occupied the place of a sacred spring, as the *asherah* apparently took the place of a sacred tree, and that the bodies found within it were offerings to the *Ba'al* of the underground waters.

The whole area of the High Place was found on excavation to be a cemetery of new-born infants. That these infants were all the victims of sacrifice is suggested by their close association with the High Place, and confirmed by the fact that two at least displayed marks of fire. These infants were deposited in large jars, which were large two-handed, pointed-base vessels. Their position is indicated on the plans by the letter *j*. The body was usually put in head first; generally two or three smaller vessels—usually a bowl and a jug—were deposited either inside the jar between the body and the mouth of the vessel, or else outside and close by the large jar. None of these smaller vessels contained organic remains or other deposits, and no ornaments or other objects were deposited with the bodies. The large jars were all badly cracked, and none of them could be even partially rescued. All were filled with earth, covering the bone and pottery deposits, but whether the earth was put in at the time of burial, or washed in afterwards I could not certainly decide from the indications afforded. So far as these excessively delicate bones could be examined, no evidence was found that the bodies were mutilated in any way. The photograph of a similar jar-burial, from a foundation deposit (fig. 513, *post*, p. 432) may be referred to. The High Place burials were identical in appearance.

Similar interments were found by Professor Sellin at Taanach, and they explain one of the most perplexing results of the excavation of Tell el-Hesi. At the latter site Professor Petrie found, outside the town enclosure, a quantity of bones buried in jars, all filled with sand. The jars were large and identical in type with the Gezer jars; they often contained smaller vessels, and usually had a bowl inverted over the top of the jar as a cover (this I also found, but not usually). Small pottery was discovered among the large jars. In short, Professor Petrie's description of his "cemetery" (*TH*, p. 32) would stand as a satisfactory description of mine, with three trifling differences: his jars are upright, mine prostrate; his are filled with fine white sand, mine with fine earth; and he found a "little wire circlet that might have been a child's bracelet," while I had no such good fortune. The extremely minute infant bones might easily be taken by one not a professed anatomist as the bones of small animals, as appears to have been done; I should probably have done so myself, if I had not been looking out for jar-burials of children, news of the Taanach discoveries having reached me. The child's bracelet is a strong argument in favour



of this explanation of the Tell el-Hesi cemetery. The "ass-bone" from that site I regard as an unimportant intrusion. The skeletons at Gezer were unfortunately too immature for certain determination of their sex.

*Objects found in the High Place.*—The High Place was not as rich as might have been hoped in objects of cult. By far the greater portion of the antiquities discovered were merely domestic utensils, belonging to the houses which had intruded on the sacred precincts. To take a single example, I find in the daily journal the following as the list of objects discovered 6 October 1902, on or near the rock in one of the pits of the area :—

Fragments of a saucer; circular stone with hole perforated in it; small globular jug with two ear-handles, neck lost, present height 5·8 cm; two large corn-grinding stones; fragment of a large pottery baking oven, cylindrical pestle, height 8·6 cm.; potsherd with a perforation through it; fragment of brick with a moulding upon it, fragment of an alabaster vase; small rude jug, hand-made, one handle, flat bottom, height 6·8 cm; spindle-whorl made of a perforated potsherd, conical pounder of quartzite, height 5·2 cm.; sets of fragments of two bowls, small cone of limestone 4·8 cm high, half of a plain saucer of thick ware, 9·8 cm. in diameter; small stone with a cup-shaped hollow scooped out of it, bronze pin 14 cm. long, with large square head; four beads; three bronze pins of common type.

This bald list is given here simply that the reader may understand the result of a good average day's work in the High Place enclosure. It will be seen that, with the possible exception of the cone, there was not a single object found which had any connexion whatever with religion.

The principal objects of religious use that were discovered were small figures of divinities and emblems of various kinds. These will be described later in the present chapter. The most valuable figure in the excavation is the bronze statuette of the horned Ashtoreth—the only indisputable figure of the goddess which has yet been discovered.

Egyptian amulets, chiefly representations of Bes, were common within the area. But here again their distribution conveys the impression that they belonged to people who happened to live over the High Place area, and that were not found in the site by reason of its special sacredness.

Beside the infant jar-burials, two other skeletons of children were found inside the precincts, to the west of the alignment: these were about six years of age. One of them was a girl, the other was too much destroyed

to allow of the sex being determined. There was also the skull of a decapitated man.

*The Bearing of the High Place on the Study of Semitic Religion.*—We may now sum up the indications which the High Place presents regarding the course of history and of religious development.

I. The cult of the standing stone, or, rather, the cult of which the standing stone is the expression, is probably not the earliest form of worship which was practised on the *tell*. A period long enough for nearly two feet of earth to accumulate must have elapsed between the first settlement of the mound and the erection of the standing stones.

II. The site of the sanctuary was chosen *probably* because (1) it was free from *tabu* consequent on the presence of sepulchres, the uncomprehended associations of earlier religions, etc.; (2) the associated caves were useful for the purposes of certain religious functions; but *not* because of the presence of springs, trees, or remarkable rocks, for there is no evidence that such existed on the spot.

III. The beginning of the High Place may on the evidence of scarabs and datable pottery be approximately dated 2000–2500 B.C.

IV. The foundation was apparently modest in its beginning, and developed through the gradual addition of pillars and buildings possibly under the auspices of successive “Kings” of Gezer.\* The house-walls found on the level of the High Place area seem not to belong to the scheme of the place of worship; no objects were found in any of them to associate them with the sanctuary. It is most likely that at first the area was an open space. On the other hand, lodgings must have been provided for the priests, *kedêshôth*, and other religious functionaries; these, however, may have lived elsewhere in the city.

V. It is impossible to determine with exactness when the alignment received its final form, but it is not inadmissible to suppose that the seventh stone may have been set up about the time of the Tell el-Amarna letters. This stone *certainly* was dragged from elsewhere, *probably* as a war-trophy, and *possibly* came from Jerusalem. It probably was previously a standing stone in the High Place of the city from which it was dragged, and it

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\* On account of the want of even approximate uniformity of size, it seems unlikely that the stones formed one scheme, erected all at one time: I would rather believe that successive governors added them one by one

might be a monument of the hostilities complained of in Abdi-Hiba's letters to the King of Egypt (see Vol. I, p. 11).

VI. The indications of the nature of the worship at the Gezer High Place, scanty though they be, prove that the sanctuary was the scene of

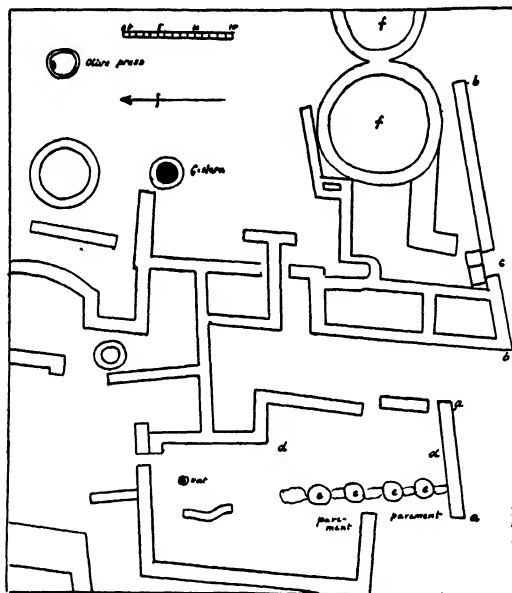


FIG. 491 —PLAN OF SUPPOSED TEMPLE

such celebrations as are described in Isaiah lvii 3 *et seq.* and other writers.

VII. That the Canaanite inhabitants of Gezer sacrificed their infant children at the High Place is proved by the cemetery of jar-buried infants found under the earth all over the area. The sacrosanct nature of the firstborn is a principle so deeply rooted in the Semitic mind, that in the earliest Pentateuchal legislation the sacrifice of the firstborn of man was

anticipated and evaded by substitution of some lawful animal. The same evasion was adopted in the case of a domestic animal (such as an ass) which it was not permitted to sacrifice.

That these sacrificed infants were the first-born, devoted in the Temple, is indicated by the fact that none were over a week old. This seems to show that the sacrifices were not offered under stress of any special calamity, or at the rites attaching to any special season of the year. The special circumstance which led to the selection of these infants must have been something inherent in the victims themselves, which devoted them to sacrifice from the moment of their birth. Among various races various circumstances are regarded as sufficient reasons for infanticide—deformity, the birth of twins, etc.; but among the Semites the one cause most likely to have been effective was primogeniture. The smaller vessels buried with the infants were probably food-vessels with a viaticum for the victim.

VIII. The empty area was afterwards encroached on when the increased population required accommodation within the walls. The sanctuary did not, however, thereby lose its holiness.

### (3) *The Semitic Temple*

This building, ruined to its foundations, was found in **IV 29**: the plan is shewn in fig. 491.

It is bounded on the south by two walls *aa bb*, not in line, but with a gap, apparently a passage way, between them. The western section of this wall, *aa*, consists of large long stones with rounded ends, piled up without any definite attempt at coursing. To the north the structure is not so definitely marked off from the surrounding buildings. In the south wall there is a doorway, *c*, with a threshold of two slabs within it.

To the north of the western section of the south wall is a building which consists of a forecourt, not quite rectangular in shape, and a paved chamber, the greater part of which had been destroyed. The chamber is separated from the forecourt by a row of four large column bases, *eeee*, each about 2' in diameter. To the east of the forecourt was a group of circular structures, *ff*. A view of this building, from the north, is given in fig. 492.

South of the row of column bases was found a long narrow courtyard, in which were standing four pillar stones and the stump of a fifth. They are well shewn in fig. 493: the diagram, Pl. ccxxiii, shews their relative positions and size. There had probably been two more, making seven, occupying the long gap between the most northern of the series and the next. These were appropriated by the builders of later structures; and were easily identified, built into the walls. The total length of the row of stones is 44' 4"; the largest stone measures 7' 6" in height, by 1' 6" by

1' 5". The alignment, like that of the great High Place, runs north and south. In the photograph the position of pillar bases *eeee* is indicated by the marks + +.

It must be admitted that these stones are roughly squared, and therefore, according to a principle laid down above in describing the High Place, they are the less likely to have been *masséboth*. But against this may be set their irregularity of height, the weakness of their foundations, and the unevenness of their tops, on which no superstructure would stand in equilibrium.

In the forecourt, by the pillar bases *eeee*, were found the "Horus-eye" amulet Pl. ccx, fig. 22, and the bronze statuette of a female divinity Pl. ccxi, fig. 2.



FIG. 2. VIEW OF SUPPOSED TEMPLE

The circular structures *ff*—which recall similar structures in the High Place—were completely filled with fragments of sheep and goat bones. These did not seem to bear any marks of burning or of cooking, which is against their being mere domestic ashpits. They might have been the receptacles for the bodies of slaughtered victims, like the cistern already described in discussing the High Place. No human remains were noticed among them.

The pillar bases I take to be the supporting stones of wooden columns on which a portico was borne. The pavement behind was the pavement of the portico, and the cella, now destroyed, was behind this again. Some such construction must have characterized the Temple of Dagon, pulled down by Samson at his death. A little study of the passage (Judges xvi) shews that the temple must have consisted

essentially of a *cella* with a flat roof; a deep distyle portico; and a forecourt open to the sky. The blind prisoner was conducted to the forecourt, where by tricks of strength and buffoonery he was compelled to give amusement to the grandees of the Philistines in the shade of the portico (cf. verse 30: the house fell *upon* the lords), and the three thousand commoners assembled on the roof. When weary he was allowed to rest a while, no doubt to gather strength for more entertainment. The natural place to allow him to rest would be just between the pillars of the portico, which would give him the advantage of the shade without incommoding the lords. Taking the opportunity he *entwined himself* (לפת) about the pillars, braced himself against them (סמך), and then putting forth his full strength and giving them a thrust



FIG. 493.—PILLARS IN SUPPOSED TEMPLE

(יט בנה), he dislodged the feet of the columns sufficiently to make the whole portico come down with its own weight.

At the eastern end of this complex of chambers, and possibly connected with it, was another row of small square pillar bases, three in number. They measured respectively (from north to south)  $3' 6'' \times 1' 6'' \times 1' 10''$ ;  $2' 2'' \times 1' 6'' \times 2' 2''$ ;  $1' 1'' \times 1' 3'' \times 1' 8''$ .

#### (4) *Sheikh Ju'âs*

On the top of a conspicuous hill to the south of the site of Gezer, and about fifteen or twenty minutes' walk from it, are the remains of a remarkable

structure shewn in the annexed plan, fig. 494, copied from a measured drawing made on the spot.

It consists of an outer square enclosure, 57' 5" by 53'; marked out by large stones carefully and regularly set (except at the south side, where, as the plan\* shews, they are not well aligned). The surface is grass-grown, but it appears as though a pavement of small stones had been laid down inside the area. Inside the court is a second, precisely similar, and a few inches higher; it measures 51' by 43' 2", approximately—the destruction of the plan by the removal of some of the stones makes it impossible to ascertain the dimensions precisely. The western side is slightly curved outward. Just inside this side is a stone, marked A on the plan,

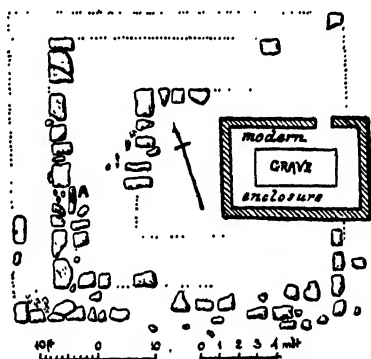


FIG 494.—PLAN OF SHEIKH JU'BÁS

which is a slab standing on its edge—the only standing stone in the structure. It is about 3' high and the same in breadth. This court also was apparently paved, and included a third court, now much destroyed, but apparently about 32' by 28'.

Some of the stones have been removed, probably to provide material for the old field boundaries, fragments of which still remain here and there. As is so often the case, however, the sanctity of the place still persists, and has been inherited by the modern *Sheikh Ju'bas*. There is a grave of the usual kind in memory of this holy man, with a rude rectangular enclosure surrounding it. This encroaches on the ancient structure. There are no modern graves surrounding the shrine, as is unfortunately the case of the *wely* on the hill-top. This is no doubt due to the absence of soil the rock crops out, and the stones of the outer court appear to be

\* Every stone is drawn from actual measurement.

laid directly upon its surface. The photographic view fig. 495 will make this description more intelligible. The man is seated on the stone at the north-west corner; the standing stone A is conspicuous a little behind him; in the background is the enclosure of the modern grave.

There is a little pottery strewn around, but none very ancient. To the north of the enclosure is a very deep cistern; it is cumbered with rubbish, but the present



FIG. 495.—VIEW OF SHEIKH JU'BÂS

depth is as much as 32'. This cistern is on the northern brow of the hill, 37' to the north of the enclosure.

Whatever this structure may be, it seems to be built on the essential plan of a Semitic religious shrine. This consists of a succession of courts, each one inside and at a higher level than the next. The Temple of Solomon and the Ziggurats of Babylonia, though so dissimilar in detail and in dedication, are alike comparable with this humble little hill-top sanctuary.



The other Muslim shrines near Abū Shūsheh, which may or may not represent ancient places of cult—there is no evidence one way or another—have been enumerated already in Vol. I, p. 5.

Sheikh Ju'bās crowns the highest point of a ridge of hills that form the southern wall of the short valley known as the Wady el-Jāihah. A little to the east of the sanctuary, on the northern slope of the ridge, is a large artificial cave, now known as Shakif ez-Zutt, or Rock-hollow of the Nawar (gipsies), because from time to time it is occupied by families of these nomads. On its eastern wall, near the entrance, symbols are carved resembling those found by Renan in certain Phoenician caves—but even more realistic. They are certainly suggestive of some form of Aphrodite cultus. A view and plan of the cave, and a photograph of the symbols, will be found on Plate ccxix.

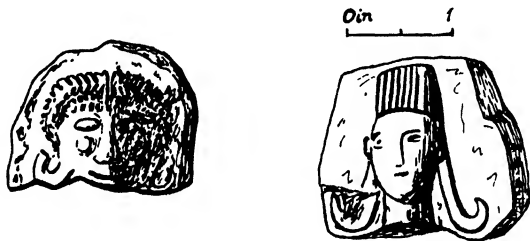
#### § 44.—OBJECTS OF CULT

In this section are described such of the representations of divinities found at Gezer as have not been described in other parts of this book. It is probable, for example, that some at least of the cow figures noticed in Chapter VI are intended to represent a bovine divinity of some kind, like the Golden Calf of the wanderings in the wilderness. It is, however, unnecessary to describe these afresh.

Of anthropoid representations of the divinity the most important and numerous class consisted of figures of an undraped female, impressed in low relief on a plaque of terra cotta. Only one specimen was found that had been modelled by the fingers of the artist: the others had all been formed in terra cotta moulds, a few of which were also found. Nearly all the examples discovered were broken, very likely for the simple reason that they were suspended to the wall, and in case of a collapse of the house were broken when they fell. They are as a rule about 6" long and 2"-2½" broad. The top is usually arched, the bottom being more or less straight. They are generally wider at the top than at the bottom: the sides either are converging straight lines or follow more or less the contour of the figure (as in Pl. ccxx, fig. 7, from the silt at the mouth of the Water-passage). As a rule the field in which the figure is contained is sunk a little below the margin of the plaque, but this is not always so. In any case the margin is rarely so broad as it is in Pl. ccxx, fig. 4.

[V 30]. In one example the side edges were bevelled downwards. The reverse side of the plaque is always plain, usually slightly convex: only in one (Pl. ccxx, fig 6 [III 27]) was the back of the figure represented. This, however, is the exceptional example referred to just now which had been modelled by the artist's fingers. It is probably superfluous to remark that viewed as *works of art* these plaques are of the smallest possible value.

There is a large number of varieties in the attitude of the figure and its general treatment, and in the accessories. The characteristics of femininity are always emphasized, and the maternal functions are generally indicated by the attitude of



FIGS 496, 497 —HEADS OF ASHTORETH PLAQUES

the figure. In some, as Pl. ccxx, fig. 19 [IV 28], pregnancy is suggested, but this is not common.

The Hathor-like wig which the figure bears is purely Egyptian, and the sideways representation of the feet in some examples (as Pl. ccxxi, fig. 8) is also reminiscent of Egyptian perspective. On the other hand, the head and the body are always full-face. As, however, the figures of Hathor are clearly the prototypes followed, I have headed the plates "Hathor-Ashtoreth plaques."

The face is childishly represented. In Pl. ccxx, fig. 5 [V 30] the extremely pointed chin is curious. Minor anatomical details, such as the fingers and toes, are as a rule slurred over; in Pl. ccxx, fig. 5a [III 28], the modelling of the feet is unusually good. In one type, described presently, the artist has equipped his goddess with six fingers on one of her hands. The headdress is always present, in one form or another. The commonest is the ordinary Hathor wig, represented by two S curves balancing one another, meeting over the forehead, the lower end thinning off and curling into a spiral. The parting between the curves is generally clearly marked, as in Pl. ccxx, fig. 5; but in some they have a tendency to coalesce. In Pl. ccxx, fig. 8 [III 12] the parting is marked by grooves: in fig. 11, a late example from the Hellenistic stratum (but probably belonging to the end of the

Fourth Semitic or to the Persian Period), it disappears altogether. In some examples the curling hair of the wig is shewn: one of them is Pl. ccxx, fig. 12, found in waste earth; another is fig. 13, found between the city walls south of the brick gateway. In fig. 14 [III a 28] the curls have become a sort of radiating nimbus. In the fragment fig. 496 [IV 2] the curls are represented by a kind of herring-bone pattern. In Pl. ccxx, fig. 15, found in the silt covering the Water-passage, there is a short veil thrown over the wig, hiding all but the front angle of the parting. Not uncommonly there is a cylindrical crown, apparently of feathers, covering the upper part of the wig completely and allowing only the spiral curves to appear. Such an example is Pl. ccxx, fig. 16 [IV 29], a later specimen is fig. 18 [V 28] where the lapels of the wig are not spiral. See also fig. 497. In Pl. ccxx, fig. 17, found in the eastern wing of cave 29 II,\* the lapels are omitted. On the other hand, there is a second lapel in the veiled type, described below: this is probably a tress of the goddess's hair, escaping from under the confines of the wig. A very Egyptian headdress appears on the plaque from IV 3 shewn in fig. 498. This has the Hathor wig, with *horns*, and above it two *maat* feathers and a uraeus.

In most of the figures there is no adornment of any kind on the rest of the body, but in a fair proportion three or four anklets (in a single case *one*) are represented, being indicated by bars crossing the lower part of the leg. Similar bars on the wrist, in similar numbers, represent bracelets. In Pl. ccxx, fig. 22, a Fourth Semitic example, there are bracelets on the left arm only: in fig. 12 they are on the right arm only: in the Third Semitic fig. 20, they are on both arms. In fig. 21 [VI 29] there are both bracelets and anklets. This happens to be the only specimen with such adornments that had preserved both arms and legs intact; but as the number of lower halves of plaques shewing anklets appears to be rather larger than the number of upper halves shewing bracelets, it seems likely that there were certain plaques on which the goddess was represented with one class of ornament and not with the other. Armlets worn on the upper arm are rare, and found, as a rule, only in the latest specimens. This may perhaps indicate that the general fashion of wearing these was of late adoption.

Necklaces were also uncommon. They are usually of beads—apparently as a rule of the pendent bottle shape. Pl. ccxx, fig. 20, already mentioned, is a good specimen. As a rule only one chain is worn; but in Pl. ccxx, fig. 23 [IV 29] there are three. Sometimes a pendant hangs from the chain, as in Pl. ccxx, fig. 2 [VI 16]



FIG 498—HATHOR-ASHTORETH  
PLAQUE OF EGYPTIAN TYPE

\* It had probably fallen through the broken rock-roof of the cave.

and Pl. ccxxi, fig. 1 [IV 3]. In the first of these the crossing of the ends of the necklace will be noticed; it is also to be seen in Pl. ccxx, fig. 16, though without the pendant. In these examples, as in fig. 23, the necklace is *not* represented as being of beads. Some lines on the neck of Pl. ccxx, fig. 17, may perhaps indicate a band or bands fitting tightly round the neck.

A remarkable Third Semitic type is shewn in fig. 499, and Pl. ccxxii, fig. 2. Three broken specimens were found. This figure is remarkable in several ways. First, there is a veil with an embroidered border, thrown over the head and flowing



FIG. 499.—"VEILED" TYPE OF ASHTORETH PLAQUE

down the back. This, however, does not hide the nudity of the figure, which, indeed, is grossly emphasized. Secondly, this type only possesses earrings: they are of the common form illustrated Pl. cxxxvi, fig. 5 and elsewhere. Thirdly, there is a necklace of beads from which hangs one of the pendent crescent amulets to be described later in this chapter. Fourthly, between the lapels of hair already mentioned, there is a pectoral of beads or precious stones. Fifthly, the figures of this type are in a ware of a rather redder colour than the others. And sixthly, the hands hold a tambourine, the edge of which is decorated with pellets. The six fingers on one of the hands have already been noticed.

The attitude of the figures varies considerably. In one group the figure is erect, the arms down the sides, and the hands pressed against the flanks (Pl. ccxx,

fig. 13, Pl. ccxxi, fig. 11 [III a 27]). In the majority, however, the hands are raised they are sometimes outstretched and hold a lotus flower or some such object, the arms being bent like a V—in Pl. ccxxi, fig. 12, a Fourth Semitic example, the lotus is not expressed but probably to be understood. More often, however, they indicate the maternal functions of the divinity. Usually (as in fig. 500, a late Third and early Fourth Semitic type, of which several fragments were found in the High Place) each hand grasps the breast nearest to it, but in some the arms are crossed under the breasts (Pl. ccxxi, fig. 13 [IV 30], fig. 14 [VI 3]). In some only one breast is held, the other arm hanging down (Pl. ccxxi, fig. 15, from the silt at the mouth of the Water-passage) or held over the lower part of the body as in Pl. ccxx, fig. 18.

In some of the plaques there are certain accessories, either separate from the figure or grasped in its hands. A border with arched top, beginning at the level of the feet of the figure and running up the sides and over the head, is to be seen in Pl. ccxxi, fig. 3 [VI 19 southern portion]. Less commonly this runs under the feet, as Pl. ccxxi, figs. 7, 8. The former of these two was one of the oldest specimens found; it was a heavy massive lump of clay with a miniature stamp impressed upon it, found on the rock. The latter is from VI 8. In a type represented by two\* specimens (Pl. ccxxi, fig. 4 [IV 13] and fig. 5 [V 29]) this margin is interrupted at the top, and the upper ends terminate in lotus flowers. The stem of the lotus is sometimes shortened so that the flower is at the level of the elbows of the figure (Pl. ccxx, fig. 21) or else so that the figure can be represented grasping the flower as though to pluck it (Pl. ccxxi, fig. 3). In some cases (as Pl. ccxx, fig. 21) the marginal line appears to rise from the lotus flower. In Pl. ccxx, fig. 12 the lotus stem is curved, as though to indicate that the goddess is drawing the flowers towards herself. This curved stem possibly suggested the type in which she is provided with serpents, as in Pl. ccxxi, fig. 9 [V 28].

In some plaques the figure is represented as holding some small object, of doubtful identification. Such are Pl. ccxx, fig. 14 (a pine-cone or pomegranate??) and Pl. ccxxi, fig. 6. The cloud-like curves of Pl. ccxxi, fig. 10 perhaps represent a present. This was found in the waste earth.



FIG. 500.—TYPE OF ASHTORETH PLAQUE, FOUND IN THE HIGH PLACE

\* There may have been more among those which have lost their tops.

The range of time over which these figures are found is very wide. One specimen (Pl. ccxxi, fig. 7), as has just been said, was found on the rock; but they do not come into general vogue till the Second Semitic Period. They are commonest about the transition from Third to Fourth Semitic, and do not finally disappear till the final destruction of the city. Two specimens were found in the late tombs 10, 76. They will be found figured in Pl. cxvi, fig. 14, and in Vol. I, p. 333 respectively. From these it will be seen that they represent as crude a conception of the divinity as in the earlier periods. The specimen from tomb 10 has armlets on the upper arm. I cannot find that any special types belong to any special times, or that there is any definite evidence that they were localized in special towns. The figures with separated legs (as Pl. ccxx, fig. 3), of which several examples were found, seem to be late on the whole, though one specimen was found in the Third Semitic stratum.

Pl. ccxx, figs. 20, 21 were the commonest types.

Pl. ccxxi, fig. 16 is a fragment of a mould for casting plaques of this kind, picked up on the surface of the mound. Another specimen, found at the entrance to the Water-passage, will be seen in Pl. xix, fig. 16.

In IV 4 a curious degeneration of the plaques of this kind was found (fig. 501). It consists of two circular discs, a larger and a smaller, joined together: the smaller disc represents the head, the larger the body and limbs—the latter having degenerated into the horns at the extremities of the rounded nicks cut out of the larger disc. The front and edges are painted red, the back being left plain. A number of small holes are pricked in the front, some following the margin of the object, some in rows in the centre. Several of these holes were surrounded by a small circular spot of darker red.\* The object is  $4\frac{1}{2}$ " long, 3" in maximum breadth, and just under  $\frac{3}{4}$ " thick.

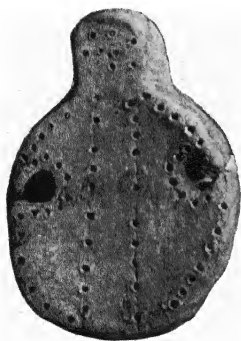


FIG. 501.—DEGENERATED ASHTORETH  
PLAQUE

A few specimens in ivory evidently carved in imitation of the Hathor-Ashtoreth plaques were found. The two examples, Pl. ccxxi, figs. 17, 18, were both found in the Hellenistic stratum; no earlier specimen came to light.

Pl. ccxx, fig. 1 [II 19] and Pl. ccxxi, fig. 19 found in the Hellenistic cistern at the N. end of trench 28, are representations of the goddess, Cypriote rather than Egyptian in their analogies.

\* The holes are too small and shallow to support pegs. I mention this fact as a correspondent suggested to me that the object might be a gaming-board for some form of solitaire.

Towards the end of the Fourth Semitic Period, and through the Persian and Hellenistic, the Cypriote "pillar" form of the *dea nutrix* figure tended to supersede the plaques. Here the body became of a pillar shape, with a slight expansion like the bell of a trumpet at the lower end, and with

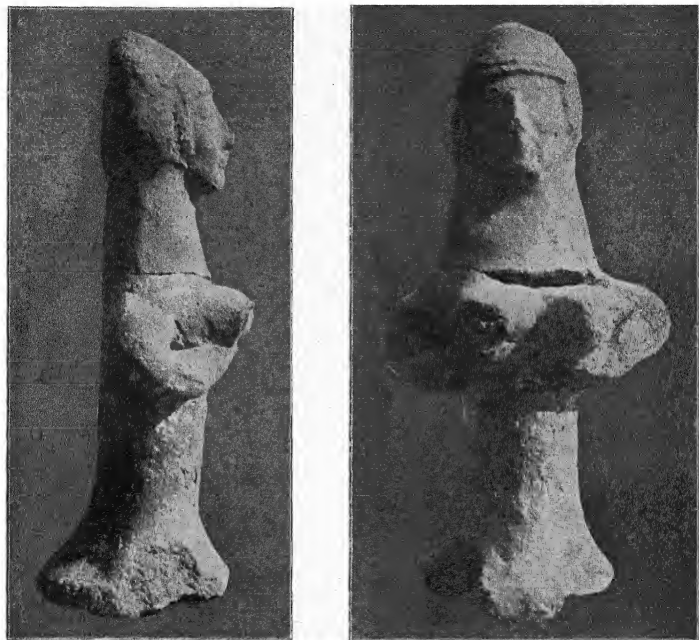


FIG. 502.—"PILLAR" TYPE OF *DEA NUTRIX*

breasts, generally very prominent, at the top. Outlines of arms underneath support the breasts. The pillar is crowned by a head with curled wig; the face wears the inane smile characteristic of late Oriental and early Classical sculpture. The heads as a rule were modelled separately

from the bodies and were secured to them by a mortice and tenon joint, concealed by working the unbaked pottery with the fingers, but seldom if ever strong enough to hold the two parts permanently together. Fig. 502 is a complete example, though as usually happens it has broken at the joint. Typical specimens of the heads will be seen in Pl. ccxxi, figs. 20-22, and of the bodies in figs. 23-25. The arms in some examples, instead of supporting the breasts, hang vertical and are pressed against the flanks.

In Pl. ccxxi, fig. 26 *a* will be seen a rudely modelled imitation of this



FIG. 503.—VESSELS FOUND WITH "ASHTORETH KARNAIM"

type, in what the German explorers expressively call *Schneemanntechnik*. As already hinted, all these figures come from the two latest strata, more especially the Fourth Semitic.

The small figure Pl. ccxxi, fig. 26, which is in pottery painted red, is interesting in that, like the "veiled" type of the plaques, it wears the crescent amulet, suspended from a necklet. It was found on the rock.

To Pl. ccxxi a few miscellaneous figures are added. Fig. 27 [Va 28] is a fragment of the middle of a rude clunch statuette: fig. 28, found outside the gate of the Maccabean Castle, is part of a similar figure. Fig. 29 [IV 8] is in brown ware; a necklace with pendant, similar to those already noted on some of the plaques, is indicated in black paint. Fig. 30, a Third Semitic example, is in slightly gritty



yellowish ware, painted red. Fig. 31 [IV 8] is for convenience drawn to a smaller scale than the rest; it is  $2\frac{1}{4}$ " in length. Fig. 32 is a fragment of similar type; it was picked up in waste earth.

A remarkable bronze figure was found in the much-ruined chamber **V 20 A**, lying on the pavement, along with a large hoard of pottery and other objects; in fact, the floor of the chamber seems to have been completely piled up with them. Nearly all the vessels were broken, but it was possible to piece together most of them, at least in part; they are shewn in the two photographs fig. 503 and the drawing fig. 504. The hoard included a large number of lamps, all of uniform type—plain and footless with triangular spouts. There were probably at least thirty, if not forty lamps; most of them were broken; only the more perfect specimens are shewn in the Plate. There are also three dishes or plates, one of them ornamented with red-painted concentric circles (fig. 504, nos.

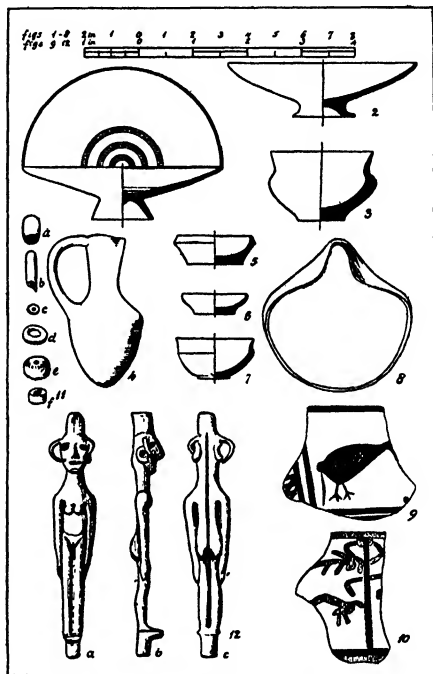


FIG. 504.—THE "ASHTORETH KARNAIM" DEPOSIT

1, 2), eight small saucers or cups (nos. 5-7), three small one-handled jugs, with rather clumsy round bases (no. 4). This coincidence of the round bases, characteristic of the Fourth Semitic Period, with the short triangular lamp-spouts which are found rather earlier, as a rule, than that period, enables

us to date the hoard to the very end of the Third or very beginning of the Fourth Semitic Period. There were also a small pot (no. 3) and two fragments of pseudo-Mycenaean bowls, one with a bird painted on it, the other with a tree-development of the octopus motive; as well as a number of commonplace beads, no. 11 *a-f*. Of these last *c* and *e* are blue, the others white (originally green) enamelled. There was also a quartzite pebble, and another pebble polished smooth on one side.

With these pieces of pottery, etc., was a small bronze statuette,  $4\frac{5}{8}$ " high, represented in fig. 504, no. 12. It represents a female, without drapery

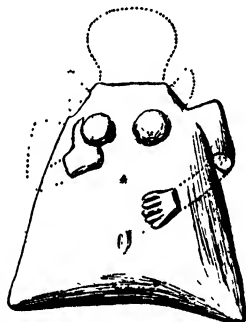


FIG. 505 — "ASTARTOID" VASE

or ornament, standing on a short tenon, for fitting in a mortice in the stand. The arms are too long and the head too large in proportion to the rest of the body. The ears, especially the left ear, are very prominent. On the head is a cylindrical headdress, probably meant to represent one of the plumed headdresses which, as we have already seen, are found on some of the plaques. The eyes are now represented by hollow sockets: probably pearls or some composition were once inserted in them. Down the back runs a deep groove. From the head, just above the ears, spring two slender horns, coiled like those of a ram, and trending downwards. These horns enable us to identify the figure as a unique representation of the Ashtoreth Karnaim, or "two-horned Astarte." This identification is important, as it seems to connect this goddess with the cattle-cult, and

not, primarily at least, with the "horn-like mountains" from which the name has been supposed to be derived.

A word must be said about what may be called "Astartoid vases." These are vessels made in the shape and with the attributes of the *dea nutrix*. One specimen from tomb no. 7 will be found illustrated in Vol. I, fig. 162 (p. 306). Another is here shewn, fig. 505. It is evidently of the form described under the heading *Third Semitic Period, shapes (k)* in § 30 (*ante*, p. 179): the saucer-shaped projection, which of course bore the face, is broken off.

Besides these figures in earthenware, there were found a large number of statuettes fashioned out of nodules of soft limestone. It was noteworthy that very few *animal*

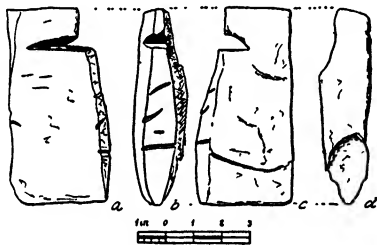


FIG. 506—LIMESTONE FIGURE FOUND IN THE CREMATORIUM

figures in this material were found. That all the figures now to be described had a religious purpose cannot of course be maintained with certainty though some of these almost shapeless objects were possibly "household gods" of one kind or another.\* Some of them appear to be modifications of phallic emblems.

Most of these limestone figures came from the Fourth Semitic stratum. The oldest of them, however (fig. 506), was found in association with the burnt remains in the Crematorium. It is simply a rectangular slab of limestone,  $7\frac{1}{2}$ " long, with a cut in one side to form the neck.

In many of these figures it seems plain that a shadowy anthropoid outline in the natural pebble has struck the finder of the stone, who has done nothing more

\* That *teraphim* were sometimes of life-size is shewn by the incident recorded in 1 Samuel xix 13, but not a trace of images of any kind at all approaching this size (except the inscribed foot of an Egyptian statue, described above, p. 312) was found in all Gezer. Such large images, however, were probably made of wood (cf. Isaiah xl 20), and indeed a stone image would have been too heavy to manipulate in the way described.

than add an indication of the face or other human characteristics. This is the case of Pl. ccxxii, no. 5 [V 3], to which a face, slightly in relief, has been added in front, and interlacing lines denoting a headdress in the back; fig. 6 [V 4] with, apparently, an imitation of drapery scratched on it (the upper half of this specimen is missing); fig. 8 [V 17] in which nothing is marked but two eyes and the lower border of a robe; fig. 13, from the Third Semitic stratum, where the two eyes alone are indicated; fig. 25 [V 28], which resembles fig. 8 with the addition of legs; fig. 9 [II 12], where the complete face and a dot in the middle of the body are added in front; fig. 17 [VI 19], where lines apparently denoting the legs are scratched; fig. 19, from the surface near the Maccabaeon Castle, where the face has degenerated into an unrecognizable convention. There is a mortice in the base, apparently meant for fixing this rude object on a stand. We may further mention here: fig. 20, from the Fourth Semitic Period, where *hands* are drawn, which is unusual (the upper part of this figure is lost), and fig. 21 [II 17], which is peculiar in having the eye-holes bored completely through. The latter may, however, be an amulet, like the pendant discs to be described later; but amulets with *two* holes for suspension are so unusual that I am more inclined to regard this as an exaggerated development of the type of fig. 13.

In a few cases the original pebble, left untrimmed, does not in itself suggest the human form. Such is fig. 22 [V 7], where, however, the artist has unmistakably added two eyes and a mouth. In the case of figs. 12 [II 29] and 15 [V 28] it is not easy to believe that the artist really understood what he was doing—the type has reached its ultimate limit of conventionalism. But we see the two eyes and the other opening already noticed in fig. 9.

In others, however, the artist has endeavoured to improve on the original anthropoid suggestion underlying the shape of the pebble, by giving it a human form; either by a cutting for a neck, as in the rude figure noticed above, found in the cremation cave, or in fig. 1 or fig. 16 [V 19], or else by so trimming the sides as to produce the stumps of arms, as in 3 and 18 [II 19]. One or two other specimens of the last four were found, but the type is not very common. In fig. 4, which is but a torso, the legs seem also to be indicated.

Improving further, our artist provided the head of his figure with eyes in fig. 7 [V 29]. The front side of this figure has been smoothed, the back left rough. There are indications that the head was painted red. Fig. 10 is a remarkable example. Here the head is left featureless, but the lower aperture is made very prominent. This was found in the Hellenistic stratum. In fig. 11 we see a type foreshadowed which is brought to its fullest perfection in fig. 2, where all the attributes of femininity, as well as the upper limbs, are represented. The former of these, which merely shews the head, eyes, and arms, is from V 28. It belongs to this series of objects, though it is made not of limestone but of drab pottery. Fig. 23, from VI 28, is merely head and body.

More ambitious are fig. 14, found on the rock, and fig. 24. In these the face is more clearly modelled than in any of the others.

A few other miscellaneous clunch figures may here be noticed. They are shewn in Plate ccxxiii. Fig. 1, which recalls the degenerated Ashtoreth already mentioned,

was picked up in the valley at the foot of the mound. Fig. 2, which shews the eyes and other apertures of the body, and indicates the arms, was found in VI 7. Fig. 3, from III a 27, is one in which the face is marked but the head not separated by shoulders from the body. In fig. 4, from the surface stratum, west of the Maccabaeon Castle, this has been done. Fig 5, from Third Semitic stratum, is in some ways curious: there are marks upon it not easy to explain. In no. 6 the head is more clearly marked than in the majority, and is remarkable for the delineation of the hair. This is from the Fourth Semitic stratum. No 7, from the much-disturbed rubbish east of the central Reservoir, resembles Pl. ccxxii, fig. 5, where hair or flowing drapery is shewn on the *back*: but this example has similar marks on both sides. No. 8 is a seated figure, probably suggested by the well-known squatting chair-like Egyptian statues. This example comes from Third Semitic débris. The form degenerates into the chair-shaped object fig. 506a. It was found in disturbed soil at the N. end of trench 2: probably it is Fourth Semitic. It is 4" high, 2½" broad, 2½" thick: the "seat" portion is an irregular cubical block 1½" high,

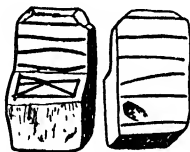


FIG. 506 a—CHAIR-SHAPED LIMESTONE OBJECT

the back being the prolongation of one side of this block as a roughly rectangular disc. On both faces of the back are traced horizontal strokes; on the seat is an envelope-like device, possibly a descendant of the double-axe motive. This object recalls the theory of Reichel (*Vorhellenische Gotterculte*, p. 3 ff) that one of the chief objects of Mycenaean worship was an *empty throne*.

The three female figures, Pl. ccxxvi, figs. 9-11, which are rudely cut out of nodules of soft limestone, are all from the Fourth Semitic stratum. Fig. 9 has been "touched up" with a comb such as is used in decorating pottery. This is uncommon in limestone objects.

#### § 45.—INSTRUMENTS OF CULT

On this branch of the subject there was very little light thrown by the excavation, except in so far as inferences might be drawn from the disposition of the High Place, and the details already given in the two preceding sections. Reference should also be made to § 46 for some special points.

The following details are all that remain to set forth under the above heading :

*Altars.*—No altar was identified in any of the structures described in § 43. It is probable that an earth-altar was erected at each of these places when required. A few objects that may have been domestic altars were, however, found.

The stone shewn in fig. 507 was found in the foundation of a building



FIG. 507.—ALTAR-STONE

in V 4, dating about 600 B.C. It was used merely as a building-stone, and therefore its true date is rather earlier than that named. The top and bottom are respectively about  $10\frac{1}{2}$ " and 9" square: the height is 1' 3". There is no inscription or device of any kind on the stone. The most interesting detail is the prolongation upwards of the angles into four knobs, doubtless the "horns" of the altar. The top is very slightly concave, and would hold about  $\frac{1}{8}$  pint of liquid.

Another stone which may have been a domestic altar was found at the place marked II 4 A. This is a square block of stone, 1' 11" long, 1' 7½" broad, and 7" high: 4½" from the middle of one of the shorter edges of the upper surface was a cup-mark, 4½" across and ½" deep. This is suggestive of a table of offerings.

Small portable *tables of offerings* begin to appear early in the Second Semitic (or late in the First Semitic) Period, and are found in every stratum down to and including the Hellenistic. A selection of these remarkable objects will be found in Pl. ccxiv. These specimens were thus distributed among the periods: figs. 2, 9, 14 were of the Second Semitic Period; figs. 3, 6 of the Third; figs. 1, 4, 7 of the Fourth; and figs. 5, 8, 10, 11, 12, 13, 15 of the Hellenistic. There is thus no special evolution in form through which they pass. It is, however, important to notice their resemblance to the wine- and olive-presses that have been described in Chapter VI, the channels cut in some cases between the hollows, and the fact that sometimes one hollow is deeper than the other (as in figs. 4, 9), recalling the pressing vat and the receiving vat of the rock-cut presses, serve to shew that this is not a mere coincidence. In fact, these objects seem to me to be miniature olive- or wine-presses, designed for an offering of the *primitiae* of the fruit-harvest.

If this suggestion be sound, it gives us, among other points, a valuable indication of the antiquity of some of the rock-cut fruit-presses to be seen in the hills of Palestine. The grooves round fig 15 may possibly represent the channels between the pressing and the receiving vat—these sometimes run partly round the vat in some such fashion. The object being broken, however, we cannot be sure of this.

Fig. 12 was of a different kind. It was of hard reddish limestone, not of the soft clunch of which the others were made, polished and square, with slightly bevelled edges: the workmanship was much better than in the other objects shewn in the Plate. It had been 4½" square and 7⁄8" thick: a little less than half was broken away and lost. In the upper face were five hemispherical depressions 1⅓" in diameter, arranged in a quincunx.

In a house dating about 1000 B.C. was found a jar of the ordinary pointed-bottom shape, with two handles, filled, apparently, with an ochreous yellow sand—it was indeed merely a lucky accident that I did not empty this out, as was always done with vessels filled with earth, on the chance of something being concealed at the bottom. The jar being quite a

commonplace one, no special note was taken of it; but some weeks afterwards it was found that the sand had, after exposure to air and light, turned into a light-brown treacly mass. When burnt it emitted a strong odour of incense. A small quantity was submitted to Mr. Purvis for analysis, who reports thus: "It is purely organic. There is nothing left of an inorganic nature when it is burnt. It is, doubtless, of botanical origin, and is probably from the *Coniferae*, which produces these resins, of a somewhat highly complex constitution chemically. They undergo changes when exposed to the air and sunlight—there is some amount of oxidation—and that explains the effect you noticed of the dry yellow powder turning to a treacly-looking stuff." There can be little doubt that this was actually a jar of incense, stored up probably for some religious purpose. It was not found actually in any of the sanctuaries, but it might have been either still in the hands of the manufacturer, or else preserved for use in the household worship of the domestic *teraphim*.

#### § 46. FOUNDATION RITES AND OTHER OBSERVANCES

Under this head we group the following miscellaneous superstitions and religious practices: the rites observed at the foundation of a building; the offering of votive gifts; the wearing of amulets; and the practice of magic and divination.

We need not waste space in enumerating cases, which might be collected from the whole world over, of a sacrifice being offered at the foundation of a building. Even in such incongruous connexions as the wild orgies of the Aztec temples and the mission settlement on the peaceful island of Iona\* it has been thought that a human life was necessary to guard the building or its future inmates from the malignity of the unseen world of spirits. In the Palestine of the present day a sacrifice is still offered when any important building is to be erected, though an animal, of course, takes the place of a human victim. The story of Hiel the Bethelite and his rebuilding of Jericho (1 Kings xvi 34) is the *locus classicus* in the Old Testament for the rite in ancient Palestine—the only Biblical passage, indeed, where any indication of the practice can be found.

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\* Here quoted simply as a tradition, without expressing any opinion as to the historic truth of the story.



That the rite was observed, however, several striking examples found in the excavation testify. The most remarkable was at **II 3 A**. This was the skeleton of a woman of advanced age, deposited in a hollow left for the purpose in the corner of the building (fig. 508). The body was lying on its back, the legs being bent up but not doubled. At the head was a small bowl, and in the angle made by the femora and tibiae a two-handled jar. Pathologically the skeleton was of some interest; its con-

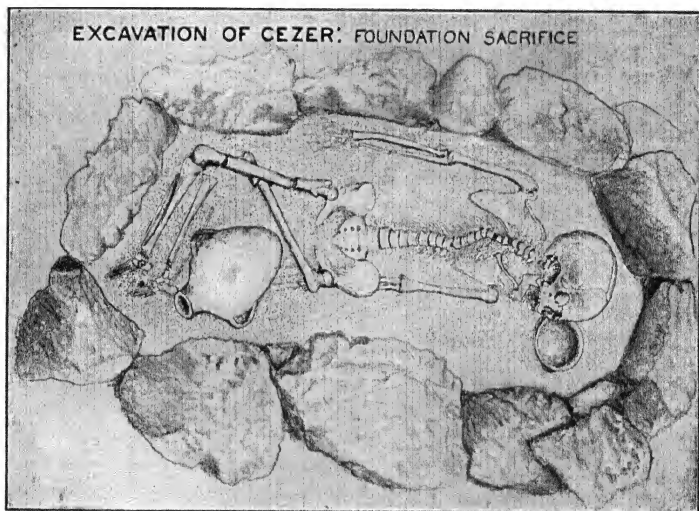


FIG. 508.—FOUNDATION DEPOSIT IN **II 3 A**

dition is described in Vol. I, p. 67. Possibly she was selected as a victim because she was useless to the community. The same was perhaps the case with the man buried under the floor in the room in **II a 28** (marked *i*, just above the word "excavated" in the Plan, Plate vii). The body in this case was stretched out at length, the head pointing to the north: judging by the position of the arms the victim had been bound, and the bones of the left hand were absent, suggesting that it had been cut off.

Another remarkable deposit is shewn in fig. 509. This was in III 30. Two adult skeletons, each lying on the right side, so that the back of one turned towards the other, were laid at length. One was certainly a male skeleton, the other was too much perished to be certain of its sex. The diagram shews, so far as the much-decayed condition of the bones permitted to determine, the disposition of the bodies. Two small jugs, one of them inverted, were placed just above the feet of the skeleton in the rear of the diagram: the feet of the foremost skeleton are raised so

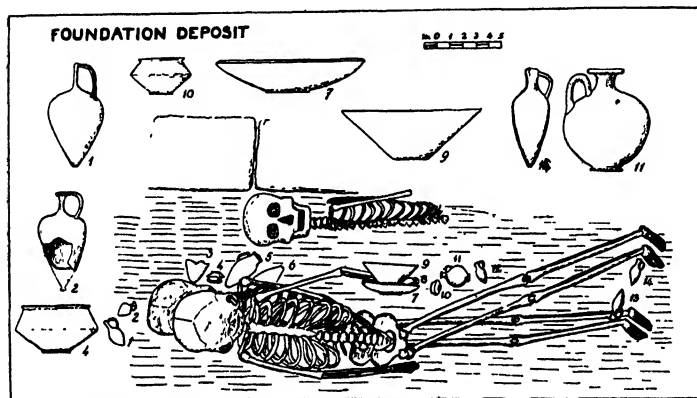


FIG 509—FOUNDATION DEPOSIT IN III 30

as to rest on the earth in which these two jugs were embedded. At the head of the rear skeleton, also, were two small jugs, and behind it were the following: the lower half of a large jar; a bowl, inverted (no. 4); and two jugs, one of them inverted, about 1' 6" long. These jugs were so much broken that they fell into a heap of minute fragments when the earth that had supported them was removed. The diagram, however, sufficiently shews their shape. Above the middle of the other skeleton was bowl no. 7, in which lay a small jug similar to no. 14 but smaller, and bowl no. 9 stood beside it. These bowls probably contained food: it was remarkable that the left hand of the skeleton was placed in it. Beyond these bowls were the smaller bowl no. 10, and the fine jug

no. 11, both lying on their sides, and a jug resembling no. 14, but smaller and much broken, standing upright.

Over all was laid part of the skeleton of a youth about eighteen years of age. The body lay on its back, but the head had fallen sideways. The youth had been cut in two at the waist, and only the upper part of the body had been deposited. The arms were crossed on the breast, each hand lying over the opposite shoulder. Small stones were laid round and under the skeleton, which, for the sake of clearness, are omitted from the diagram. The heads of all the skeletons pointed south-east.



FIG. 510.—MUTILATED SKELETON FOUND IN CISTERN III 2 B

The mutilated condition of this body leads us to speak here of another strange deposit of bones found in the cistern III 2 B. This cistern is cylindrical rather than bell-shaped, 20' 6" deep, and averaging about 15' 3" in diameter at the bottom. The entrance is a circular hole about 3' across. In the middle of the floor is a silt-pit 5' across and 1' 5½" deep; the floor is covered with a thick deposit of tough slimy clay, in which were embedded many fragments of water pitchers: one of these is shewn in Pl. clxiv, fig. 5. This shews that the excavation was originally made for, and for a time was used as, an ordinary cistern.

On the upper surface of the silt floor were laid the remains of fifteen persons—fourteen males aged about eighteen to about fifty, and one female aged about sixteen. The body of the latter had been cut in two at the eighth thoracic vertebra: the front ends of the ribs had been divided at the same level, proving that the mutilation had taken place when the bones were still supported by the soft parts. This skeleton is

shewn in fig. 510. The remaining bodies lay along the wall of the cistern, in complete confusion, as the diagram (fig. 511) shews. Stones were laid under, round, and above them: and there was a considerable amount of charcoal here and there in the stratum containing the bones. The bones were all in their proper relative

position, so the bodies had not fallen into water and floated about till they dropped to pieces. With them were deposited a number of bronze spear-heads and other objects, some of which are shewn in fig. 511; their position in the cave can be learnt from the diagram.

A, C, D, E are spear-heads with hollow sockets: the stump of the wooden shaft still remained in the hollow of A when found, though it rapidly decayed after being extracted from the earth. A ring, hammered and riveted, was passed over the end of C to keep the joint from opening. E is a fine example 1' 5" long, with a blade ornamentally ribbed. B is a knife flanged for ivory hafting-plates secured by bronze pins; the latter still remain. F is the common form of axe-head. With D was found a needle, having the eye in the middle of the shank and a twisted head. Beside these was a cow's horn, associated with F, and a three-legged stone mortar, resembling

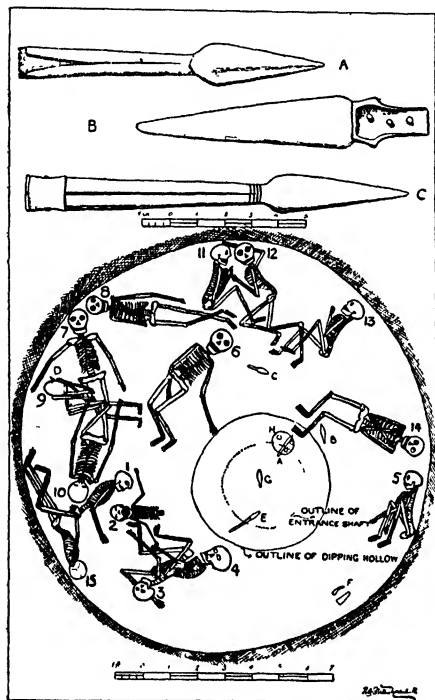


FIG. 511.—DEPOSIT OF BONES, ETC., IN CISTERN III 2 B

fig. 229 c (p. 37 ante). The latter was broken, and inverted over some sheep bones. A small jug, resembling Pl. clxxxvii, fig. 6, was the only piece of pottery from the chamber possessing any characteristic features: it probably was of a date later than the skeletons. As the spears must have originally had wooden shafts, long since

rotted away, it is possible by an imaginary restoration to associate some of these various deposits with individual bodies. A, F, and G seem independent of any; but B seems to belong to 5 or 14, C to 6, D to 9, E to 4, and perhaps H to 14.

The cave is so inconvenient to enter that it can hardly have been used as a burial-place on several successive occasions. It is more probable that the bodies were those of victims of a single tragedy who were all buried together. Some mysterious cause—*e.g.* an obscure epidemic—may have brought about the deaths of the men, and the girl may have been sacrificed in an exceptionally barbarous fashion as a propitiation. But we really are guessing in the dark when we try to account for this weird charnel-house without knowing all the circumstances of its tragedy.

Close to the mouth, outside the cistern, were found the skulls of two young girls; as no other bones were forthcoming, these children seem to have been beheaded—whether at the same or at a different time it is impossible to say. In later times

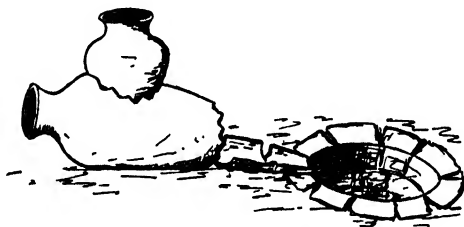


FIG. 512.—DRAIN OF POTSDHERDS

the cistern was used as a cess-pit, a shaft being built carrying up the mouth through the débris that had accumulated since the original excavation, and a drain constructed of old potsherds (fig. 512) was made to lead to it. The stratum of deposit that thus accumulated above the bones yielded nothing of interest.

Adult or adolescent victims were, however, rare in comparison with the number of infants or very young children, whose remains were found under the corners of houses. Such deposits were found in all the Semitic strata. They were not actually unknown, but were very rare, in the Hellenistic stratum. The deposit was identical in its nature with the infant burials in the High Place above described: the body of the child was put into a large jar, the mouth of which was broken to admit of its being passed in; and one or two small food vessels were usually, though not always, deposited either inside or outside the larger jar. Fig. 513 shews a typical deposit of the kind.

I obtained a medical opinion on the question of whether these bones

were those of still-born children, or whether they had actually lived an independent life. The verdict was that, though evidently very young, the children had probably not been still-born. This was important, for it might otherwise be supposed that we had merely a custom analogous to that of the modern Egyptian fellahin, who bury still-born infants and untimely births in the corners of the rooms of their houses. On the contrary, the Egyptian custom is more probably to be regarded as a reminiscence of the ancient rite which required a life to secure the luck of the house.

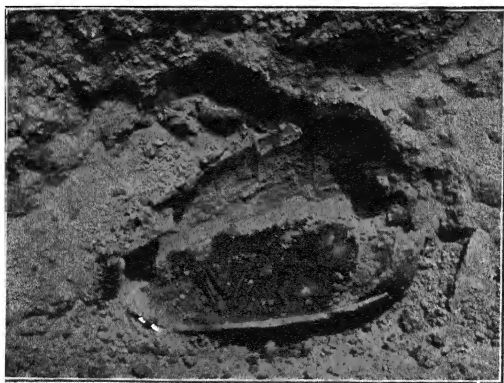


FIG. 513.—INFANT SKELETON DEPOSITED IN A JAR

At II 21 B was a very important deposit of this nature, with an unusual quantity of pottery, of which the following is a list. The diagram fig. 514 shows the shapes and positions of the vessels: (1) a long jar with pointed base, containing the bones of a new-born infant. The mouth had been broken to admit the body (fig. 513 represents this very jar, opened to shew the skeleton).\* (2, 3) Two bowls, deposited above the jar. (4, 5) Two plain hemispherical saucers, one inside the other, and both

\* It may be interesting to mention how this photograph was secured. I had made many attempts to clear the earth from the infant skeletons in these jar-deposits for photographic purposes, but always in vain—notwithstanding the most scrupulous care, an unlucky touch was sure to disarrange one or more of these delicate bones. In this case I hit on the device of allowing water to fall, drop by drop, from the corner of a wet handkerchief upon the skeleton. After an hour or two of this process the skeleton was cleaned sufficiently and none of the bones were moved in the slightest degree. This hint may be useful to others, and I therefore mention it.

inside no 2. (6) A jug with a round mouth and one handle standing upright behind the jar no 1. (7, 8) Two lamps, one inside the other, placed between the jug no 6 and the jar no 1, near the bottom of the former (9) A small jug with one handle, placed beside the larger jug, with two lamps between it and the jar no 1. The jar no 1, containing the bones, was under the wall, its outer surface flush with the face of the wall. The vessels that were behind it were therefore under the middle of the wall. This should be noticed, as it proves that the wall was built over the deposit, and not the deposit placed beside the wall; in other words, that we have a true foundation rite, and not the mere putting away of the body of a still-born child. The further interest of this deposit will be mentioned immediately.

As is generally the case in such rites as this, attempts were made to soften its barbarity while preserving its spirit. A curious example of this was found at the north end of III 30. Here, in a corner of the building there represented, was a large jar with pointed bottom, no handle, the neck and mouth broken away. The length of the remaining portion was 2' 0 $\frac{1}{2}$ ", the maximum diameter 1' 4 $\frac{1}{2}$ ". Inside the jar was found an assortment of small silver

objects, the types of which are drawn in fig. 515. There is also one of bronze.

The bronze is cut to a rude representation of a human outline. It is made of a thin sheet of bronze 2 $\frac{1}{4}$ " long. The arms are bent outwards from the body, but otherwise the figure, so to speak, is in two dimensions. It is the largest of the objects drawn in the group.

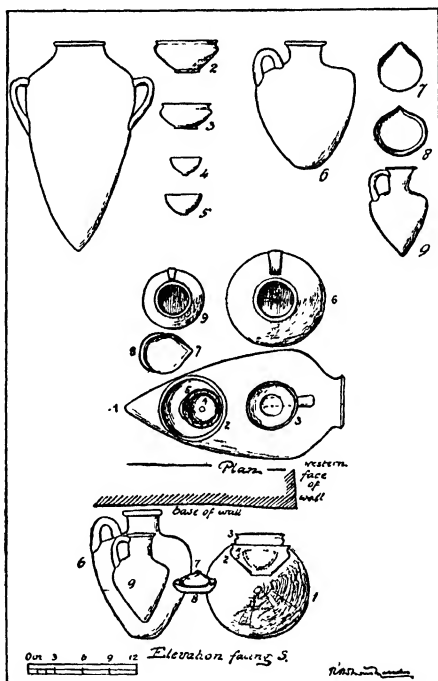


FIG 514—DETAILS OF FOUNDATION DEPOSIT IN II 21 B

The other objects, of silver, are also cut out of thin laminae. Most of them were in small fragments, but portions of about ten representations of human figures (including the three comparatively perfect ones drawn) were found. A number of them were corroded into a mass which it was impossible to separate without breaking them into small pieces, so delicate and so eaten through with rust were they.

There were also four small saucers like the specimen drawn, three of them corroded with the mass we have mentioned, and one thin narrow strip of bronze.

The length of the silver figures was  $1\frac{1}{8}$ " ; the diameter of the saucers about  $\frac{1}{16}$ ".

This deposit seems to be a *model* of a foundation sacrifice, in which the bronze and silver "men" represent the human victims, and the little silver saucers represent the food vessels usually deposited with their bodies.

This, however, so far as Gezer, and indeed all the mounds hitherto excavated in Palestine, are concerned, remains a unique case. Of far greater importance, and apparently of universal usage in the country, is the custom of depositing a group of

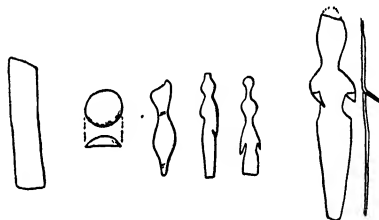


FIG. 515.—MODEL OF A FOUNDATION DEPOSIT

pottery vessels under or beside the foundations. The groups almost invariably consist of lamps and bowls; and it is the presence of lamps and bowls in the pottery deposited with the sacrificed infant just described that makes this deposit so important. For it is thus the connecting-link between the human sacrifices and the harmless lamp-and-bowl deposits.

Lamp-and-bowl deposits were found at Tell el-Hesi (*MMC*, p. 84), and the Shephelah tells (*EP*, p. 151): but Gezer, on the whole, offered the fullest material for their study. We must first consider their position, then their composition, and then very briefly suggest what may have been the ideas underlying the custom.

(1) *Position*—These deposits are unknown before the Second Semitic Period and rare until we approach the middle of the Third. In the Fourth they are common, but are infrequent in the Hellenistic stratum, though not entirely absent. Throughout all the strata they are almost invariably placed in corners of rooms or under the thresholds of doorways. Indeed it is possible to explain the exceptions as the result of ruin—either the wall has been ruined to below the threshold of the doorway, in which case the lamp-and-bowl deposit appears simply in the middle of an unbroken stretch of masonry; or else the wall may have been removed altogether, leaving



the deposit in the middle of an open space. As a rule they are beside the lowest stone of the wall, not under the foundation, and against the inner face.\*

The rite, though common, was by no means universal. Many houses shewed no trace of it. On the other hand, large series of deposits were sometimes found. Thus, in V 3 there was a series of seven—two under the jambs of a door, two at the ends of walls, two *in* internal angles, and one *under* an internal angle. In V 4, south of the large thick wall, where a number of olive-presses seems to indicate an oil manufactory, there were eight groups

(2) *Composition*.—This varies both with regard to the number of the pieces and their position relatively to one another. It is evident that the details of the deposit were of no importance† at any period, and nothing chronological or otherwise can be made out from the way in which the vessels are grouped. The following is a selection of specimens of grouping, arranged according to the number of component pieces:—

[moq lamp [IV 28, VI 17]	[moq lamp bowl (passini)	[moq lamp lamp [V 28]	[moq lamp stand [V 29]‡	[moq lamp bowl bowl [V 4]	bowl [moq lamp bowl [V 4]	stand lamp bowl [V 28]
bowl [moq lamp bowl [V 29]§	[moq lamp bowl [V 18]	bowl [moq lamp bowl [V 4]	bowl [moq lamp bowl [V 4]	bowl [moq lamp bowl [V 4]	bowl [moq lamp bowl [VI 4]	bowl [moq lamp bowl [VI 4]
[moq lamp bowl [VI 4]	[moq lamp bowl [VI 4]	[moq lamp bowl [V 28]¶	[moq lamp bowl [V 28]¶	[moq lamp bowl [V 28]¶	[moq lamp bowl [IV 29]	[moq lamp bowl [IV 29]

The above will shew that the minimum number of vessels is two, which is,

\* From this it follows that lamps and bowls are a valuable help in planning houses, and indicate the probable position of doorways when these have disappeared with the ruin of the building. This was unfortunately not understood at the beginning of the work, and several deposits of this nature were cleared away without their exact place being recorded. Later, their positions were always carefully noted, and will be found in the plans indicated by the letter /

† Just as in modern foundation deposits, copies of current newspapers and coins are placed under the foundation stone, but it is indifferent what newspaper or coins are thus selected for preservation.

‡ The lamp unbaked, ashes in the stand

§ Another found in III 19 with a few wood-ashes in the lower bowl

|| The foot of the stand broken off and placed beside the bowl on edge.

¶ The bottom bowl and each of the lower bowls of the inverted pairs unbaked

however, not common; the maximum number found is seven. Nearly all consist of a bowl, containing a lamp, with another bowl inverted over it, as in fig. 516: the variations are formed by adding other lamps, bowls, or a stand—*i.e.* such a vessel as is shewn in Pl. xci, figs. 12-17—in various positions with respect to them. The varieties above tabulated are not necessarily all that were found: it would scarcely be worth while giving an exhaustive list; it is enough to shew that there is no rule in the matter of arrangement.

(3) *Purpose*.—In attempting to discover the ideas underlying this foundation rite, we must bear in mind the following points:—

(a) Though in the majority of cases the pottery is crushed and broken, by the

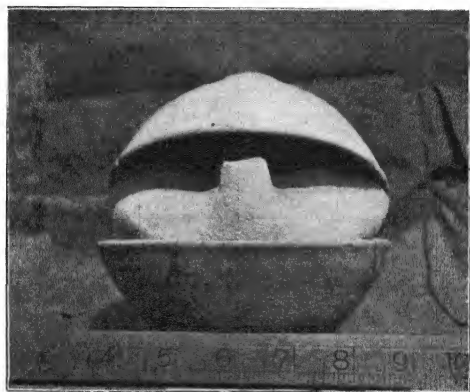


FIG. 516.—NORMAL LAMP-AND-BOWL DEPOSIT

weight of stones or of débris over them, the pieces seem, as a rule, to have been deposited new, and specially provided for the occasion. Indeed in several cases one of the vessels was actually unbaked, as though it had been made for the purpose and dried hastily without waiting to fire it. The painted "palm and panelled zigzag" pattern was especially common in the bowls found in the Fourth Semitic deposits of this period—*i.e.* the highest artistic effort of which the potters of that effete period were capable was pressed into service for the decoration of the bowls. Some of the lamps shewed marks of smoke-blackening on the spout, but one received the impression that the bowls had been deposited new.

(β) The bowls are frequently made water-tight by having a kind of lime cement smeared over and pressed into cracks in the pottery. This suggests that the rite may have involved the pouring of some liquid—blood or its representative, grape-juice—into the vessels deposited. A few cases were found in which the lower bowl contained

wood-ashes, and in one or two there was sand in the lower vessel. The Tell el-Hesi examples (*MMC, loc. cit*) were filled with fine earth. Had sand been an essential, there was plenty of it to be got not far from Gezer, at Ramleh: we may, I think, infer that this was an unimportant variant.

If the bowls contained blood or grape-juice when they were placed in position, the combination of blood and fire thus typified by the bowl and the lamp would be very suitable as a symbol of sacrifice, even although these particular sacrifices were never burnt. The symbol, however, never succeeded, to the end of the Semitic periods, in supplanting altogether the rite in its original form

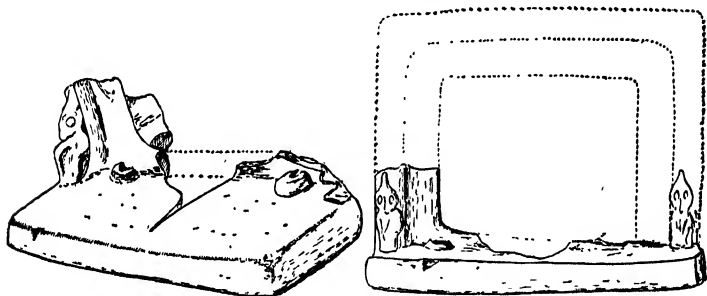


FIG. 517.—FRAGMENT OF A POTTERY SHRINE

### *Votive Offerings*

A number of objects found in various parts of the mound (but, it must be admitted, *not* in the proximity of any of the apparently sacred buildings) can most conveniently be explained as votive offerings. The term is, however, often abused, and it is possible that some simpler interpretation should in some cases be preferred. I have not, however, succeeded in hitting on one that satisfies me.

*Shrines.*—In III 30 were found the surviving fragments of the remarkable object, fig. 517. It is made of hard homogeneous pottery black in the middle of the fractured section, and of a light reddish tinge near the surface, and covered with a cream-coloured slip. The shrine itself has gone, save for some insignificant fragments of the walls and floor. Separating it from the open forecourt is a doorway which has been 8"-8½" in breadth. Its sill is raised ½" above the level of the forecourt and ⅝" above that of the floor of the shrine. The section of the sill is

triangular, with rounded apex. The forecourt measures 1' in length across the front of the façade and  $4\frac{1}{4}$ " in width. It is a slab of pottery  $\frac{7}{8}$ " thick. The vertical edges are rounded. There is no evidence as to the height of the entrance doorway or the manner of roofing of the *cella*. The jamb

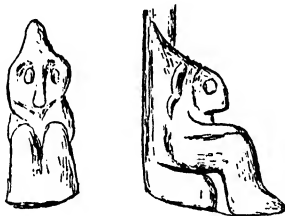


FIG. 518.—SEATED FIGURE FROM POTTERY SHRINE

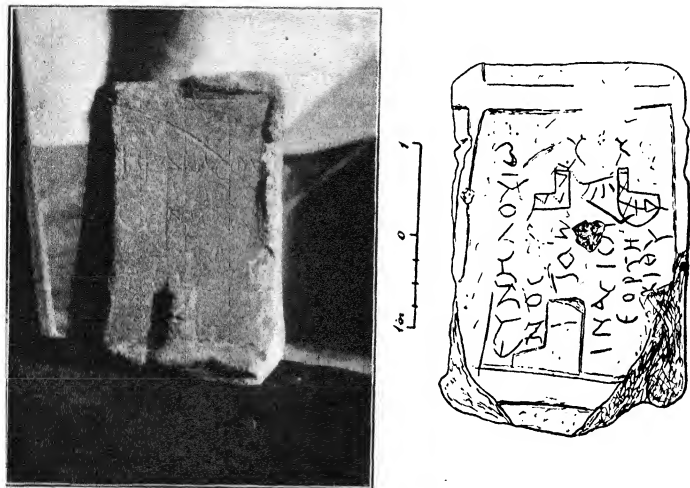
of the doorway is  $2\frac{1}{4}$ " broad, and is interrupted by a moulded ridge running up about the middle of its face. On the outside of this moulding there is on one side a quaint seated figure, the front and side aspects of which are shown in fig. 518. It wears a high-peaked cap. The nose



FIG. 519.—PHOTOGRAPH OF POTTERY SHRINE

is prominent and quite overshadows the lower part of the face. The eyes are pellets, moulded separately and stuck on. The ears are large and prominent. The hands rest on the knees. The modelling is too indefinite to tell us anything regarding the costume of the figure. A

fracture on the surface of the forecourt in the corresponding place on the opposite side shows that another figure, probably of similar style, was placed there. On the inner side of the moulding against which the figure is seated, and just under the corners of the door, are two vats or stoups, one on each side. These are a little more than half a circle in shape, about 1" in diameter and  $\frac{1}{4}$ " high. They probably represent lavers for



FIGS. 520, 521.—THE ALTAR OF EUNĒLOS: FIRST AND SECOND FACES

ablutions. In view of the great importance of this object a photograph (fig. 519) is appended in addition to the diagrams.

Fragments of analogous objects will be found illustrated in Pl. cliv, figs. 9, 13. In Pl. ccxxv, figs. 3, 4, 6, are what appear to be small shrines from the Hellenistic stratum. Figs. 3, 4 might possibly be fragments of one and the same object, but the first was found in VI 29, and the other was discovered in the great central reservoir. Fig. 6 was found in VI 27: it is Egyptian in style.

*Altars.*—Confined to the Hellenistic stratum was a curious group of

objects which for convenience may be called votive altars. The most interesting of these was found in VI 17. It is a block of soft chalky limestone  $3\frac{3}{4}$ " high,  $2\frac{3}{4}$ " broad, and  $2\frac{1}{8}$ " thick. It is irregularly made, none of its sides being truly rectangular. The top is slightly hollowed. The interest of this object lies in the fact that all four sides are inscribed. The first side is recessed within a much-broken frame (fig 520). A small tongue, probably a baetylic emblem, projects upward over the face of the panel from the lower border: it is  $\frac{3}{4}$ " long and  $\frac{3}{8}$ " across. The inscription, which is in horizontal lines, reads:

ΗΡΑΚΛΕΟΥΣ  
ΝΕΙΚΗ  
ΕΥΝΗΛΟΥ  
ΠΟΗ[CI]C

The second face (fig. 521) is similar to the first, but broader. It likewise has a frame surrounding it with a projecting tongue below, in this case J shaped. The writing reads vertically from bottom to top. At the upper end is a device of random lines (?two gazelles). The inscription is:

ΕΥΝΗΛΟΥΙΩ  
ΝΟC  
ΙΔΩ  
ΙΝΔCΙΟΥ  
ΕΟΡΤΗ  
\*\*ΚΙΟΥ

On the third face (fig 522) are four lines of much-worn writing, also reading vertically upward, within a simple ornamental border: a vertical stroke divides the panel in two. The letters, as far as I could make them out, appear to be:

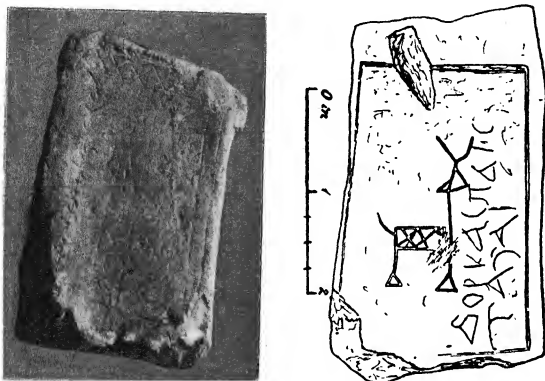
ΑΤΑΦ[ΗΧ?]ΕΙ  
ΤΟ\*ΝΙΚΔ\*  
ΟΝ[ΟΙΧ]\*ΧΕ[ΡΩ?]  
ΧΟ[ΡΤ?]\*ΝΑC

The fourth face (fig. 523) bears a rude representation of a gazelle, with this inscription:

ΔΟΡΚΑC ΠΑΙC  
ΤΑΤΑΙ

This side is perhaps a palimpsest: there is a faint  $\Delta$  visible between the horns of the gazelle which may be a surviving letter of an older inscription. Similar but less definite traces appear elsewhere on this face and on the third face.

Dr. R. Wunsch has ingeniously interpreted the first two sides of this inscription, in a paper contributed by Prof. Hermann Thiersch to the *Jahrbuch des Kaiserlich Deutschen Archäologischen Instituts*, 1909, col. 573. He explains it as implying that one *Eunēlos* made a *poem*, in honour or thanks for a *victory* which he owed to *Heracles*: Eunēlos was *son of Iōn*, and having forgotten to enter his father's name on side I, I,



FIGS. 522, 523.—THE ALTAR OF EUNĒLOS: THIRD AND FOURTH FACES

he placed it on side II, which gives the further information that the prize was won *at the feast of Iōδ Inasios, with a dithyramb* [Dr. Wunsch expands the injured last line διθυρ(ἀμβω)]. The third line, over which I spent many hours under different conditions of lighting, defies interpretation. The last line seems to refer to a person called Dorcas, with a punning picture of a gazelle (δορκάς) and an interjection found elsewhere only in Latin (Plaut. Stichus 771).<sup>\*</sup> In any case the inscription shews a remarkable case of syncretism of Heracles with Yahweh worship. While I cannot

<sup>\*</sup> Dr. Wunsch (*loc. cit.*) also gives an alternative rendering of the Pampras inscription (Vol. I, p. 212), which reached me too late to notice in its proper place. He reads Παμπρᾶς Τίωνος κατεπράγη παρὰ [τὸ] βασιλείων: and comments thus, "καταπρώγω, verzehre, Aristoph. Ach. 809 κατέπραγον. Von ἐπραγον kann pass. das nicht belegte ἐπράγην gebildet werden, wie von ἐπραφον ein ἐπράφην. Man kann auch κατεπάρη, Itacismus für κατεπάρει, lesen, cacavit."

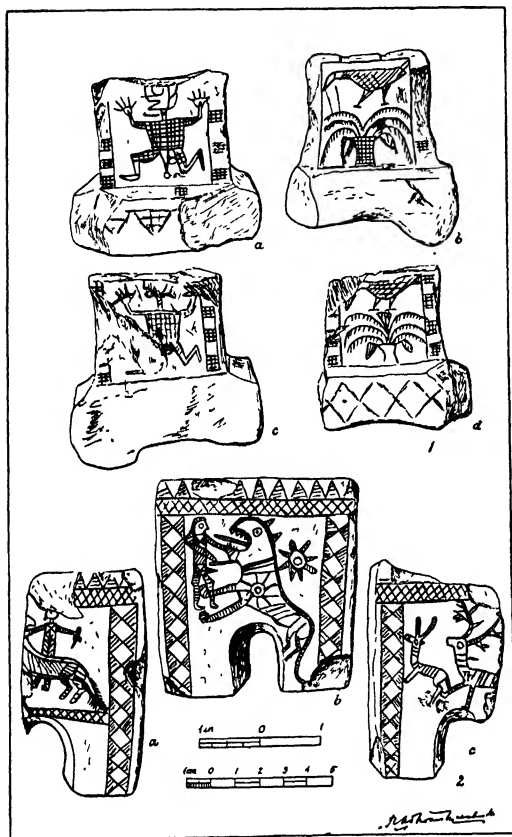


FIG. 524.—SUPPOSED VOTIVE ALTARS

like later scribbles: "the child Dorcas" has scratched gazelles: Eorte,\* daughter

sufficiently express my admiration for this ingenious dovetailing of the various elements of the inscription, I confess that I do not understand "the feast of Yahweh Inasios"; and that my own preference is to regard the inscription on the first side, which is carefully though lightly scratched, and, unlike the others, reads across horizontally, as the only original inscription, and as meaning "the victory of Heracles: the work of Eunēlos"—taking *πο(λ)ηνος* in its more general though rarer sense of a manufacture, not necessarily the composition of a poem, and referring to the "altar" itself. The beginning of the writing on the second face may predicate a further dedication of the same altar, by Eunēlos, to Iaō. The other inscriptions look to me more

\* Eorte occurs as a proper name on an inscription from Aydınjik, south of the isthmus of Cyzicus. See *Revue archéologique*, vol iii, part 1, p. 2.



of —kithos, has written her name: the seemingly meaningless third side may contain some magical formulae.

Another altar of the same shape, but with only a rectangle cut on each face, will be seen in Pl. ccxxv, fig 5. It was found in running a trench outside the outer city wall on the south side. A third specimen was found which had a rectangle on one side only; in each of the upper corners of the rectangle was a dot. Fig. 10 [VI 29] is similar, but has no marks except a simple moulding near the top, other than the accidental scratches made by the knife in trimming it. Fig. 12 [VI 29] is more



FIG. 525.—SUPPOSED VOTIVE ALTAR

elaborately moulded, and has on one side what appears to be meant for a floral decoration. Both these altars are much chipped and broken.

We now come to a series of objects of this kind which have remarkable drawings upon them. Fig. 524, no. 1 is perhaps the most curious. It was found in VI 12, and consists of a square block, like the Eunēlos altar, but provided with a plinth. The object is  $2\frac{3}{4}$ " high. On two sides are figures, one male, the other female, executing a wild dance. On the other two are palm-trees, with birds above (possibly the male and female palm-trees are intended, the bird perhaps being supposed to be fertilizing them: this would accord with the class of ideas that evidently were in the mind of the artist).

In fig. 213 (*ante*, p. 12) is shewn another "altar" of this kind, cylindrical, however, instead of square. A small fragment of a second cylindrical altar, on a flat square plinth, was found, but too insignificant to make it worth illustrating. There were no designs upon it.

There is another and commoner class of votive altar, also (with one exception) confined to the Hellenistic stratum. This consists of a rectangular box of soft limestone, supported by feet at the corners. The one exception mentioned is Pl. ccxxv, fig. 9, which was Fourth Semitic. On

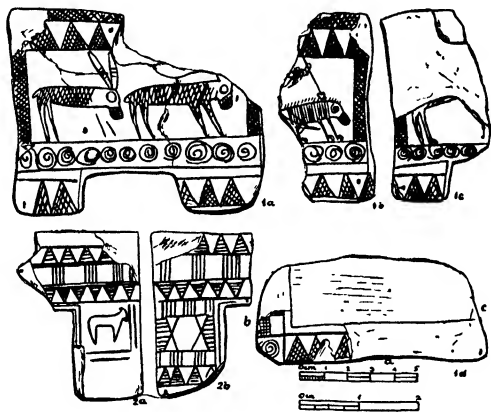


FIG 526—SUPPOSED VOTIVE ALTARS

one side there appears to be an animal, the other devices are unintelligible. In VI 8 was found a box of this kind, measuring 3" by  $2\frac{3}{8}$ ", by 2" high, with nothing but a horizontal line on one side. Another, from VI 12, measured 3" square and was  $2\frac{1}{2}$ " high: it had a chequer of vertical and horizontal lines on one side, making three horizontal rows of six squares each.

More elaborate and interesting is the specimen in fig. 525, found outside the N.E. corner tower of the city wall. It is  $3\frac{1}{4}$ " long by  $3\frac{1}{8}$ " high: half of it is broken away, leaving a fragment  $2\frac{1}{2}$ " broad. The depression is  $\frac{1}{8}$ " deep below the rim. The perfect side is slightly concave. On the

top surface are scratched frets and spirals; on the perfect side are two animals; on one of the broken sides is an animal with long ears; on the other is a man in a short-sleeved tunic, driving an animal whose tufted tail alone is left. Marks of smoke-blackening are to be seen on the fragment, which is also cracked, apparently by heat. Another is shewn in fig. 524, no. 2: it is likewise broken. On one face is a man struggling with a huge animal, behind which is a star; on one of the two broken sides is a man, apparently stabbing an animal; on the other is a stag with its hind.

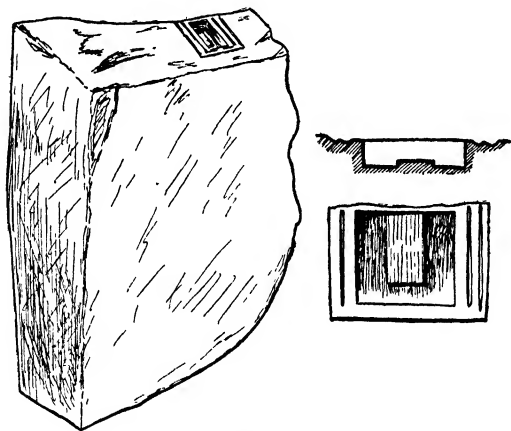


FIG. 527.—BUILDING-STONE, WITH BAETYL CUT UPON IT

Two more of the same kind are shewn in fig. 526. The first resembles the others in having childishly drawn animals, one of them falling a victim to a man with a spear. The second is remarkable for the design being almost entirely ornamental, with one small animal only introduced, and that in quite a subordinate position.

The object figured in Vol. I, p. 358, fig. 185, from tomb 147, though rather larger than these, can scarcely be dissociated from them.

Another variety of altar, from VI 16, is shewn in Pl. ccxxv, fig. 2. Here there is a square block, as in the first class, but rising in the top by

two steps to a point. There is a groove traced all round a little more than half-way up.

*Bactyls, Cones, and Phalli.*—In fig. 527 is represented a building-stone, measuring  $1' 9'' \times 1' 3'' \times 7''$ , found in a wall of the important house in Rujm 'Abd Allah, described in Vol. I, pp. 173-175. At one end is cut a small sinking, within which a rectangular block is left uncut. With this may be compared the apparently bactylic cutting in the Water-passage,



FIG. 528.—LIMESTONE CONE

Vol. I, p. 260. Numbers of similar cuttings have been observed at Petra. Pl. ccxxiii, figs. 12-14, and Pl. ccxxv, fig. 1, are specimens of large numbers of conical stones that were found, especially in the Fourth Semitic Period. As a rule these were about 3" or 4" long, but some few (as in the example photographed, fig. 528), were not far short of a foot in height. It is probable that these stones also had a baetylic significance. An analogous object in white coral is shewn in Pl. ccxxv, fig. 13.

A large number of phalli of soft limestone were found, especially in the High Place enclosure, where they came to light in basketfuls. Pl. ccxxiii, figs. 15-18, will sufficiently illustrate these objects. The last two of these are specimens of a not very uncommon group in which the symbol is given the form of a human figure.

The miniature cippus fig. 529, which was picked up on the surface of the mound, may perhaps be mentioned here. Notwithstanding the crosses on the face and base of the stone, it is not probably a Christian monument. On one side is cut the name *Lysimachus* in Greek letters; on the other is a word of which only four letters, *zeus*, are legible. A vertical stroke cut after each word acts as a stop.

*Models of feet.*—Pl. ccxxv, fig. 7, found just under the foundation of the Maccabaeon Castle, and fig. 8 [V 30] are rudely cut models of feet,

which may perhaps be counted among votive offerings. With them may be associated the foot cut on the wall in cave 30 IV (Vol. I, p. 148) and especially the curious tablet here shewn (fig. 530) found in V 30, which has evidently been prepared especially for the purpose of receiving a print

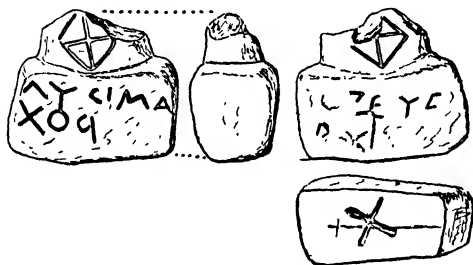


FIG. 529.—INSCRIBED FRAGMENT

of a child's left foot. The tablet measures  $4\frac{1}{8}'' \times 1\frac{5}{8}'' \times \frac{3}{4}''$  thick: the child was probably about three years of age. The tablet is shaped to the outline of the foot, and after the impression was made it was carefully baked hard, which would scarcely have been done had the child trodden accidentally on a chance fragment of earth. A small lump on the impression shews

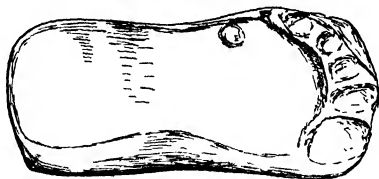


FIG. 530.—CLAY TABLET WITH IMPRESSION OF A CHILD'S FOOT

that the child had sustained a severe bruise. It is possible that this tablet was obtained for some magical purpose—possibly enemies of the child's parents desired to hurt them by spells. A slight chip that has carried away the tips of the three smallest toes is the only injury the tablet has sustained.

*Models of things.*—Principal among these may be mentioned small thin imitation axe-heads or daggers made of laminae of bronze. They are nowhere very common, but are most frequent in the Fourth Semitic stratum.

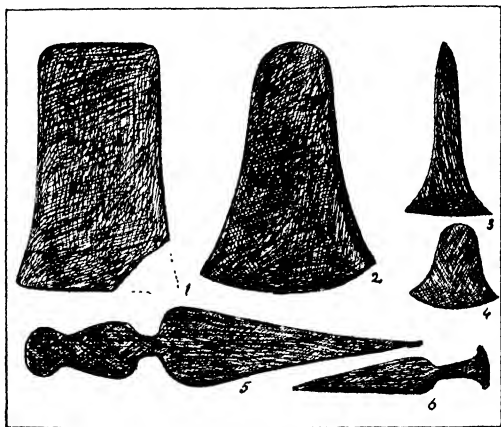


FIG. 531.—VOTIVE MODELS OF BRONZE WEAPONS

They resemble the votive axe-heads sometimes found in Egyptian foundation deposits, but they were never discovered in such a position at Gezer. Fig. 531 shews a representative selection, no. 1 is from V 28,

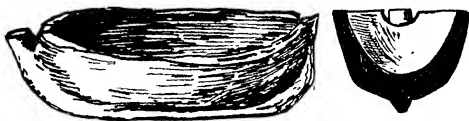


FIG. 532.—MODEL OF A BOAT

no. 2 is Third Semitic, no. 3 from VI 29, no. 4 from V 16, no. 5 from IV 29, and no. 6 from III 29.

The model of a boat in pottery, represented in fig. 532, was found in V 9. It is especially interesting in connexion with the great naval activity

of the time of King Solomon, which is about the date to which the object might be assigned. It is roughly hand-modelled in coarse brown pottery, 7" long, 2" broad, and  $2\frac{3}{4}$ " across. The model is not sufficiently well made for us to determine minutiae of construction; but save that the ship is pointed at both ends it closely resembles a modern fishing-boat in general outline. There is a strong and prominent keel, which turns upwards, and ends in a short post at both ends (the stern end is broken). The bulwarks are notched in order to leave this post isolated, as the section shews.

## Amulets

In Modern Palestine probably nine-tenths of the natives, Jew, Christian, and Muslim, wear an amulet of some kind, whether it be a blue bead, a metal charm, or merely a scroll of paper. A large proportion of the amulets now in use are written words or sentences, in some cases meaningless gibberish: perhaps these are corruptions of ancient formulae, which had they survived would have explained much that is now obscure. The only inscribed charm that had survived from antiquity at Gezer was the disc of glass inscribed ΕΥΤΥΧΩC ΤΩ ΦΟΡΟΥΝΤΙ (Vol. I, p. 350), which calls for no comment.

The amulets of Egyptian origin have already been described in § 37. The beads and other personal adornments discussed in Chapter VI had probably, as has been there hinted, a significance beyond the mere aesthetic, but to these also it is unnecessary to return.

The earliest amulets surviving were of bone. The metacarpal of a goat, with two holes for suspension, was found in the Troglodyte Crematorium (fig. 533). A similar amulet was found in cave 27 I (see Pl. xxviii, fig. 20), and in the ancient cistern east of cave 30 IV—in the latter there were two lines cut across the bone underneath the perforations.

It is possible that the femur-head "spindle-whorls" described above, p. 73, were also used for amulets.

The boar's tusk was an important prophylactic. it is still used to avert the evil eye from horses. The tusks are used in pairs, placed base to base to form a crescent, and are united by a silver band; a ring of silver attached to the band serves to suspend the amulet. Separate boar's tusks were common throughout the excavation, but no example of such a crescent was



FIG 533.  
BONE AMU-  
LET FROM  
THE CREMA-  
TORIUM

found: it was, however, frequently imitated in silver, especially in the Second Semitic Period, though they are found in all strata. Examples will be seen in Pl. xxxi, figs. 13, 25, and, as illustration of the possibility of extremes in date as in size, others are shewn in Pl. ccxxvi\*: figs. 6, 7 were found on the rock, figs. 8-10 (of which the last two have no loops for suspension) are from the Hellenistic stratum. A similar crescent (without loop for suspension) of *bronze* was found in Third Semitic débris, and one of gold is shewn, *ante*, p. 102, fig. 287; but silver was by far the commonest material for this class of object.†

Certain oddly-shaped or coloured stones of natural origin—concretions, crystals, fossils, and the like—were found here and there in the excavation. These cannot have grown by nature in the débris. they must have been picked in the fields, by the sea, or on the hill-sides, and carried into the city—certainly not as “curiosities,” possibly, though improbably, as playthings, most likely because in the eyes of the finders they would be what the expressive Anglo-African jargon calls “big medicine.” Two or three such nodules are shown in the Plate, others, some of considerable size, might have been added were there any point in doing so. Fig. 13 was found in V 19, fig. 14 in VI 29. A similar specimen, fig 15 [III 27], was perforated, fig 16 [VI 17] is an imitation in clay of some such object. Probably many of these stones attracted attention because there was a phallic suggestiveness in their shape.

A large series of amulets were made of black slate, basalt, or similar coloured stone. These as a rule are discs, about 2"-4" in length, with a countersunk perforation in the upper end, cut to a triangular or rectangular shape. Such amulets appear throughout the whole Semitic Period, but are much commoner in the lower strata. Rectangular discs are more frequent than triangular. Some flat circular pebbles are also found, apparently water-worn, and with no artificial working except the perforation: in one, however, from IV 16 there was a deep cut crossing the two faces. In one or two the perforation is begun at both sides, but the complete drilling is unfinished. Fig. 17 [IV 30] is an illustration of both the latter statements.

Examples of the varieties in shape are shewn in the Plate. Fig. 4 is a minute

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\* Throughout the paragraphs on Amulets reference is made to Plate ccxxvi unless otherwise stated

† For a discussion of these pendent crescents see a paper by Prof. Ridgeway on “The Origin of the Turkish Crescent” in the *Journal of the Anthropological Institute*, vol. xxxviii, p. 241



specimen, practically a pendent bead. Fig 5 is one of the triangular shape. In fig 11, from the rock, the triangle is broadened at the apex into a trapezium, which in such an example as fig 18, from late Second Semitic debris, becomes a rectangle. The corners of this rectangle may be rounded off, giving us an oval, short (fig. 19 from III 27: in this case also the perforation does not go through) or long (fig 20, from Maccabaeen stratum: similar ones are common in the Fourth Semitic stratum). It will be noticed in the last example how the two faces converge to a chisel-pointed end; but in some they diverge, as in fig 12, which has a pyramidal or sinker-shape. This specimen was picked up on the surface of the ground. Fig. 32, from the rock, is unusually broad in proportion to its length.

In fig. 534 the second example is a curved bar, triangular in section ( $1\frac{1}{4}$ " long and  $\frac{3}{8}$ " across). These amulets were found in V 2.

Besides stone, such disc-shaped amulets may be made of pottery, as in fig. 21, which was found on the rock in trench 15. It is perhaps more likely, however, that this may be a weaver's weight. Fig. 22, cut from a black-coloured potsherd, from III 13, is similar.

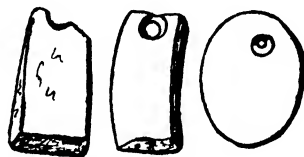


FIG 534.—STONE AMULETS

Other shapes and other stones are found, though less frequently than those above mentioned. Fig 3 is especially interesting: it is a pendant in the shape of a celt, of serpentine: found in debris of the Tell el-Amarna Period on the top of the brick gate. With it were the two figs 1, 2: the first of polished basalt, semicircular in section: the second a club-shaped pendant in slate. The irregularly shaped disc of serpentine fig. 23, from VI 30, may also be mentioned. The flat disc of slate with two grooves on it (fig. 24) is imperfect, so it is impossible to say whether it be part of an amulet or not. It comes from the First Semitic stratum.

The cylindrical pendant fig. 25, from IV 13, is curious in having a groove cut round it instead of the normal perforation.

A few pendants of exceptional shape or ornament may be mentioned here, before we proceed to the club-shaped amulets of the later period, which form one of the most important groups. Fig. 26 was apparently a circular disc of drab pottery, from the Fourth Semitic Period. It is remarkable for its size, a peculiarity which it shares with fig. 27, from II 17, which is of a light porous stone. Fig. 28, from the Fourth Semitic, is quite unique at Gezer: possibly the hollow was for containing some written charm. Fig. 29, of limestone, also from the Fourth Semitic Period, is peculiar for the cuts and hollows upon its surface—recalling the rude limestone figures with hollows

for eyes to which we have already made allusion in this chapter. With it may be compared fig. 30, in sun-dried clay (waste earth), which has three perforations, one going through, the others simply cup-hollows. Quite remarkable is the haematite torpedo-shaped weight fig. 31, with a thick bronze ring passing through a hole drilled in it. This is from VI 13. A similar object, but with the weight made of bronze, was found in cave VIII 1.

The most characteristic amulet of the Fourth Semitic Period is a club-shaped pendant of slate, bone, or ivory, perforated for suspension at the narrow end. This form already appears in the earliest Semitic strata, as fig. 33 illustrates. This was found in the rock in trench 12. Near it was the small sinker-shaped pendant of bone fig. 34. Fig. 2, as we have already seen, is of the Tell el-Amarna Period. All the other examples in slate of which I have notes come from the Fourth Semitic Period. Fig. 35 is a good specimen of the type, both in size and shape, fig. 36, which is of yellowish limestone, is unusually short, fig. 37 unusually thick, fig. 38, which is of a greenish-coloured stone, is curious for the abortive experiment that has evidently been made at drilling the hole a little too high up. Figs. 39, 40 are two other abnormal examples. The first, II 10, is the only specimen found with the hole drilled through the broad end, the second (Fourth Semitic) is unusually small. Both the latter are of a greenish-coloured stone.

Most of the amulets in this shape are, however, in bone or ivory. Some of these are plain, as fig. 41, but as a rule they bear ornamentation. This ornamentation is either a collar round the stem, or a series of punch-marks, always a small circle with a dot in the centre, generally arranged in vertical rows. In some the two forms of ornament are combined.

Only one specimen of this type of amulet was found in debris older than the Fourth Semitic, it is probable that its presence (in the Second) is due to some accidental circumstance—either it fell from the side of a pit during excavation, or else sunk at some early time owing to some one digging a hole. By comparison between the various specimens of which I have made drawings I am inclined to deduce that the amulets ornamented with a collar alone are older (by perhaps 100 years or so) than those with punch-marks upon them. But I do not assert this beyond question.

The collar consists of lines cut round the stem between the middle of the amulet and the loop for suspension. In the examples that I have come across there are two, three, four, or six lines in these collars. In a few there is a second collar near the base, but this is rare. Some are more elaborate: the lines forming the collar are divided into two groups, one and one (more commonly two and two) and the space between them filled with oblique strokes in one direction or the other, or, more commonly, with a fret. In fig. 62, from V 16, there are lines traced round the body of the amulet at regular intervals. Examples illustrating these remarks will be seen in figs. 42-48. The last mentioned is the example found in the Second Semitic stratum. In fig. 49 the collar is unusually low down on the stem.

The punch-marks just mentioned will be noticed in several of these amulets. There is no variation in these, save in number and arrangement: apparently there was no rule regulating these which made the amulet useless if the rule was departed

from. The only fixed point is that the marks are always in vertical lines. The number of these lines varies from two to seven: the number of marks in each row varies from three to seven. As a rule there is an equal number of punch-marks in the rows in individual specimens, but even this is not always the case. Specimens have been found with—

2 rows 3 in each = 6 (fig. 50)	4 rows 4 in each = 16, a common variety (fig. 51)
2 " 4 " = 8	4 " 5 " = 20
3 " 4, 4, 5 = 13	4 " 6 " = 24
3 " 5 in each = 15	4 " 5, 5, 5, 6 = 21
3 " 6, 6, 7 = 19 (fig. 52)	4 " 7 in each = 28
3 " 7, 7, 8 = 22	5 " 4 " = 20
4 " 3 in each = 12 (fig. 54)	7 " 7 " = 49 (fig. 53)

In fig. 55 the rows are spaced out remarkably widely; in fig. 56 the whole surface is covered with punch-marks, sixty-four in number. The last is a unique case.

Fig. 57 is an amulet of the same type, but of different shape. It is also rather earlier, being of the Third Semitic Period. It was found in the silt above the Water-passage. Figs 58–60 are allied forms in which the club has become a disc with punch-marks upon it. In fig. 63, which was found in waste earth, but no doubt belongs to the same period, there are three rows of ten perforations, with the usual punch-marks between.

Fig. 40*a* is a small perforated pendant of shell from VI 27.

We need only refer to the silver locket, fig. 410, described above, p. 263, which was probably an amulet.

### *Magic and Divination*

Except in so far as an element of magic entered into the religious rites of which we have now set forth the evidence, little or nothing directly connected with the practices of magic or divination came to light. Perhaps the most suggestive is the tablet (fig. 535) of hard-baked red clay, found in V 7. It is an irregular oval,  $3\frac{1}{8}$ "– $3\frac{3}{8}$ " in diameter. A rudely scratched line, following the margin of the tablet, surrounds the inscribed face: the space within it is divided by vertical and horizontal lines into squares, each of which contains two strokes parallel to the shorter axis of the tablet. In the middle a circular space has been marked out and smoothed by the potter with the end of his right thumb, after the chequers were marked on the tablet: for though almost effaced they are still traceable on the smoothed surface. The adjacent part of the design has been smudged with the first joint of the thumb. Notches as though to receive a cord are made at each end of the long axis of the oval, in the edge of the

tablet: no mark of a cord can, however, be detected on either face of the tablet. It is possible that this object is a diagram used in some kind of divination; but it is also not inadmissible to suppose that it may be merely an ornamental jar-stopper. In any case it remains unique, so far, at least, as Gezer is concerned.

#### § 47.—CHRISTIAN ANTIQUITIES

A very few words will be all that is needed to remind the reader of the principal ecclesiastical antiquities discovered. Except the fragmentary



FIG. 535.—TABLET POSSIBLY USED FOR MAGICAL PURPOSES

inscription (Vol. I, p. 42) they were all found in the Byzantine tombs. This inscription is tantalizing: it seems to read ΚΥ (κυρίου) ΠΡΟΔΕ... where the second word might perhaps be a derivative of προδείκνυμι. The whole might thus mean something like "forth-shewer of the Lord"; but with a fragment so small we can hardly expect to arrive at any satisfactory conclusion as to its true meaning.

The small crosses (as Pl. lxxviii, fig. 25), as well as the Christian devices on lamps, as the cross (*e.g.* Pl. xciii, fig. 11), the fish\* (Pl. cxii,

\* This may be a modification of such a floral device as Pl. xcix, fig. 7; or it may even be a derivative of the ΦΩC ΧΥ motto.

fig. 12), and especially the inscriptions (see pp. 227, 228, *ante*), may be recalled. Of greater interest are the two seals, figured in Vol. I, pp. 374, 375, which seem to bear the head of Our Lord and of the Virgin Mary.

But the most notable object belonging to this short section is that shewn in Vol. I, p. 388. It is a little monument of the rites and practices of the ancient Church in Palestine, another example of which, in the form of a peacock, was discovered some years ago at Umm Thuba, and is now preserved in the Museum of St. Anne at Jerusalem.\* The small circular space covered with a disc of glass firmly cemented down is explained as a receptacle for a crumb of Eucharistic bread: the object thus seems to be a relic of an ancient practice of giving the sacrament to, or depositing it with, the dead, referred to in Amphilochius' *Life of Saint Basil*, and forbidden by the Councils of Carthage (A.D. 397), Auxerre (A.D. 578), and Constantinople (A.D. 691).

And here closes the record of the discoveries at Gezer.

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\* See an article by the Rev. Père Leon Cré in *Revue Biblique*, vol. iii, p. 277



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 Chisel                  Paint grinder and  
 Chopper                palette  
 Comb                   Pick  
 Cooking-pot and      Plane  
 tray                    Plough  
 Corn rubber and      Polishing tool  
 grinder                Potter's wheel  
 Crucible               Pounder  
 Drill                    Pricker  
 Feeding-bottle      Pulley  
 Filter                   Quern  
 Fire-tray              Roof-roller  
 Fish-hook              Saw  
 Flesh-hook            Scraper  
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